

# SCHOOLS

# ARTS



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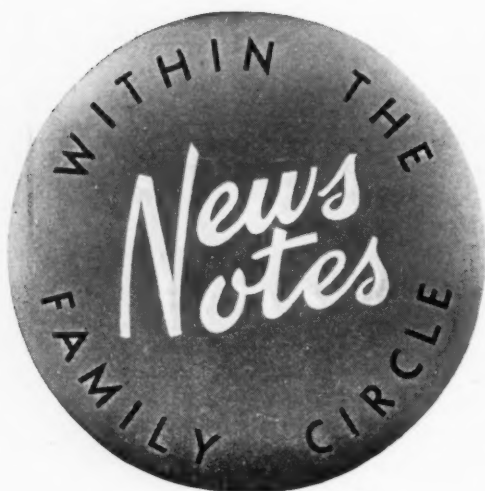
ART MATERIAL AND EQUIPMENT

FEBRUARY 1967

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Into the color pots of Nature the Friendship Press dipped their brushes, daubed color on freely and brought to life "The Map of India." This color map, 28 by 32 inches in size, is a technicolor picture story of India.

Swinging from a limb is a gibbon, his black mask peering at us from behind green foliage. The faces of India's rulers smile a welcome from their places of honor. Elephants, sacred cows, tigers, and peacocks stalk through the grasses at the bottom. Miniature Indian people parade along the edge of the map showing styles of dress. See how high caste Indus dress, delight in the colorful headdresses of the natives. Marvel at the spell-binding beauty of Taj Mahal, architectural wonder of the world.

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Do you recall the clear glass goblet that was your favorite piece? How lovingly Grandma removed the goblet from its place, perched you on her knee and told you its wondrous story. Perhaps she related the oft told tale of how your favorite goblet was blown in Sandwich, Massachusetts. It was there that the first radical change occurred in the glass industry with the invention of the glass pressing machine. See the various types of pitchers, goblets, flasks, and vases of that era. Delight in the delicate designs decorating many of these glasses.

Send 28 cents to Secretary, *School Arts Family*, 172 Printers Building, Worcester 8, Mass., for your copy of "Early American Glassware," before March 31, 1947.

#### BIBLIOGRAPHY OF AMERICAN PAINTING AND SCULPTURE

Leafing through the pages of the November issue of *The Magazine of Art*, I came upon a bibliography of American Painting and Sculpture. Compiled by Elizabeth McCausland, the bibliography gives an all-over picture of American Art History from colonial times to the present.

Covering 20 pages of the November issue, it shows the development of American Art History by the use of a chronological arrangement that allows the reader to observe how gaps in the knowledge of American art are being filled. Among the famed artists in the bibliography are Winslow Homer, George F. Bellows, and Thomas H. Benton.

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With Flag Day peering around the corner and the birthdays of our country's leading statesmen close at hand, this poster will be invaluable to all teachers for classroom use. Send 28 cents to Secretary, *School Arts Family*, 172 Printers Bldg., Worcester 8, Mass., for "Flags of American Liberty," before March 31, 1947.

#### AMERICAN INDIAN CRAFTS

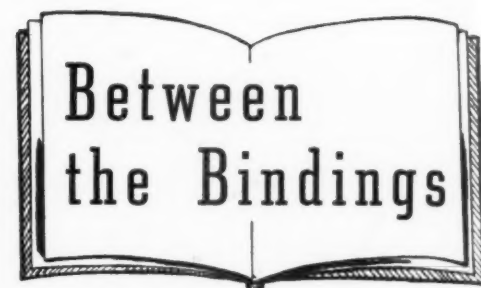
The first inhabitants of the United States, their crafts and lore, are the subject of the 64-page book, "American Indian Crafts." Published by Plume Trading and Sales Co., Inc., the book contains 20 plates on Indian moccasins, war bonnets, drums, and tom-toms.

Packed into the pages of this book is information on Indian war bonnets, the different styles of the tribes, how to make an Indian bustle, in fact, how to make a whole Indian costume, from the moccasins to the headdress, from leggings to robes, even how to make the war clubs of the Indians.

Whether you are a teacher of Indian crafts or the leader of scout troops, you'll find this book an asset to you. Send 78 cents to Secretary, *School Arts Family*, 172 Printers Bldg., Worcester 8, Mass., for "American Indian Crafts," before March 31, 1947.

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Send only \$2.65 for a complete "round trip" of the February Family Circle. For this small amount you receive a poster, a map, booklet and bibliography to add zest to your classrooms and variety to your reference files. The address is Secretary, *School Arts Family*, 172 Printers Bldg., Worcester 8, Mass., before March 31, 1947.



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All the trappings of Indian life are yours to study and to make from this book that makes you a "member of the tribe"—whether it be Plains or Woodland, Hopi or Chippewa.

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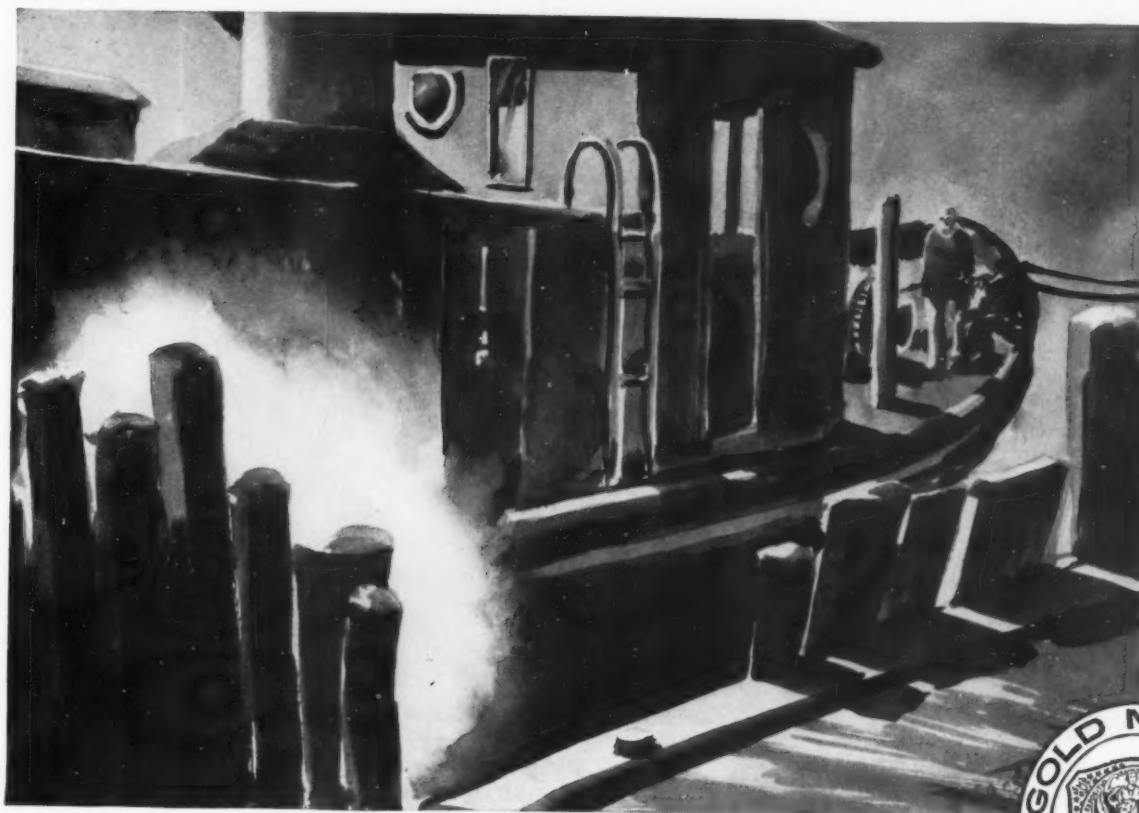
Perhaps you want to go animal hunting in the zoo—or maybe you prefer to capture the activity of the city with a few strokes of your pencil—it's all a matter of making use of outline and shadow to suggest rather than trying to copy complete details.

Divided into 11 chapters with almost every page illustrated, this book is as interesting as a fiction book, for the author has the ability to write in conversational style with references to the illustrative drawings that bring out the fun to be derived from a "pencil companion."

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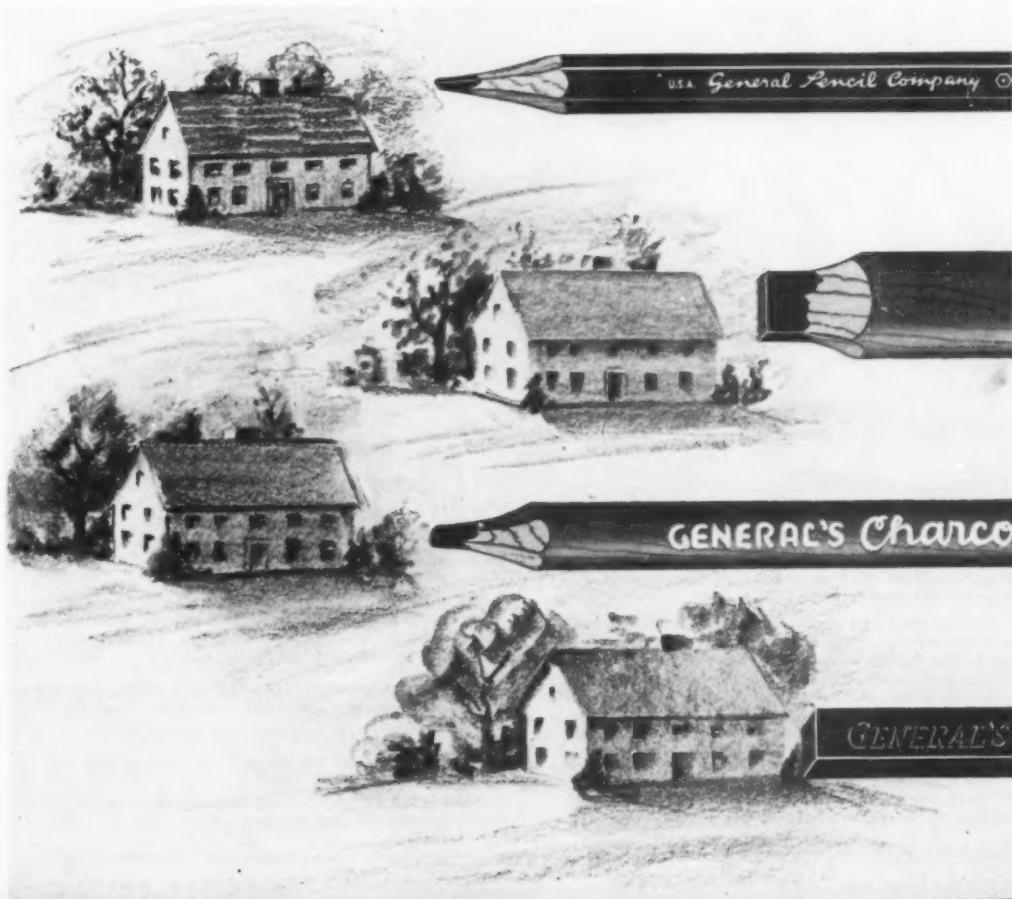
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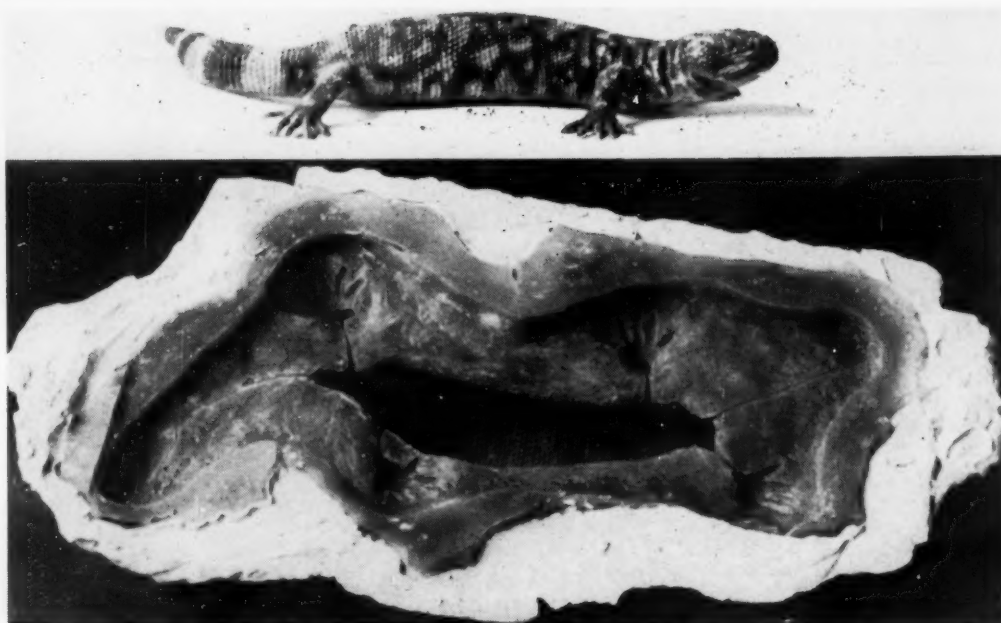
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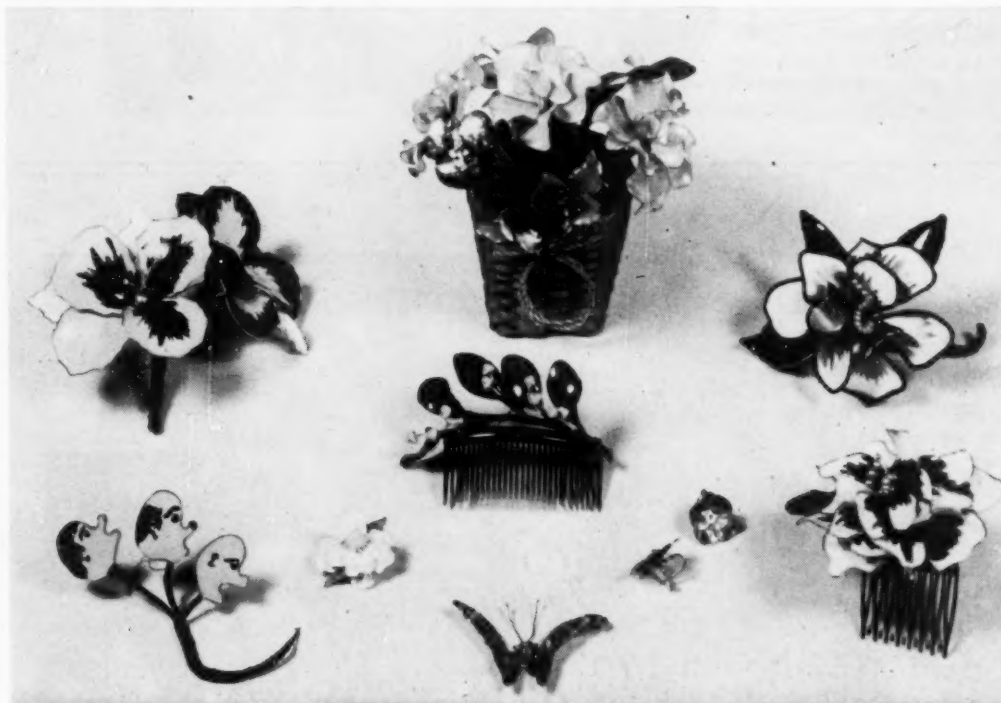
The illustration shows a Gila monster cast in a rubber mold for use with the Armed Forces in the Pacific Theatre—courtesy of the Universal School of Handicrafts where this war research was carried on.

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School Arts, February 1947





# SCHOOL ARTS

A PUBLICATION for THOSE INTERESTED in ART EDUCATION

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Edited by JANE REHNSTRAND, Associate Editor

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## MATERIALS IN ACTION



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Mary Gallagher,  
Instructor



LEON L. WINSLOW  
Department of Education  
Baltimore, Maryland



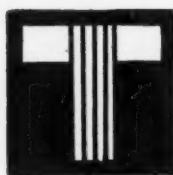
Carnegie Art Scholarship Students enrolled in Painting Course, Maryland Institute



General Art Course  
Ninth Grade  
Art Curriculum  
M. Antoinette Ritter,  
Instructor

# AN APPROACH TO VOLUME DESIGN

HELEN WANN ANNEN  
Associate Professor of Art Education  
University of Wisconsin



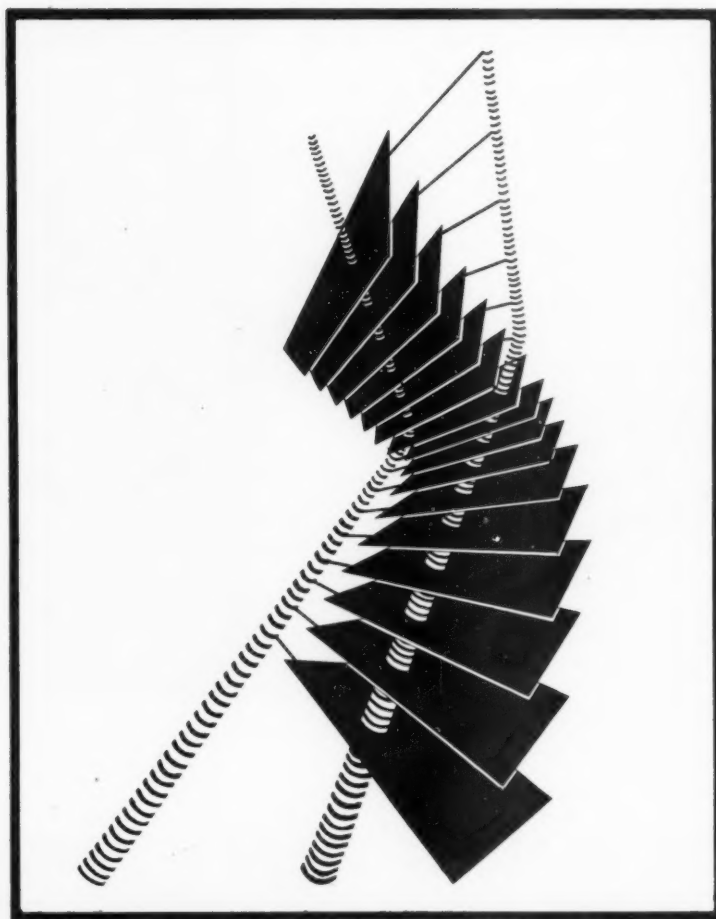
THE beginning designer needs to undergo an arduous training period when he undertakes to work in three-dimensional forms. Just as he develops pattern units in two dimensions with paper and paint, he should develop units in clay, wood, metals, plastics—in fact, any materials he can lay his hands on. He should apply to these units the same principles of arrangement as with two-dimensional pattern, grown immeasurably more difficult and complex, but also infinitely wider in possibilities.

For one thing, he will find that form is now two elements instead of one. It is form, and it is also space. We learn in our paint and paper units that the unpainted or "background" shapes must also be designed, must contain interest, must integrate with the painted shapes. In a three-dimensional unit, the spaces between solids are also a part of your design. In fact, the spaces are sometimes more valuable than the enclosing forms. Are the walls more valuable than the rooms they contain? Is an opaque material more a part of a structure than a transparent one? Is solidity or permanence necessary in a material for construction? And how about movement? Are our units necessarily static? The industrial designer who plans an electric fan or a locomotive knows better than that, but the creative designer is just beginning to realize the potentialities of movement as decoration.

Most art teachers have realized the difficulties involved in the study of volume design with the limited resources and equipment of the average school-room. Actually, it can be taught with no other tools and materials than paper and scissors. I use abstract three-dimensional forms in paper as an approach to volume design in wood, plaster, metal, clay, or plastics. The paper should be stiff enough to hold its shape. Construction paper or ordinary drawing paper can be used, and for larger forms, desk-size blotters are very successful.

The relationship of material and the method of construction can be emphasized as well in this medium as in any other, and such principles of design as a sequence of sizes, opposition of form and direction, variation of contour, a dominant area or center of interest, can be brought out as well in paper as in any material.

The basic purpose of the problem, of course, is the importance of space in relation to solid form, and the



development of the ability to see space and the shape of space.

The problem is open to many variations—it may be a standing form, a free-hanging form, or one to be seen vertically, fastened to a background. It may be of transparent or opaque material. The transparent acetates are an inexpensive substitute for plastics, may be cut with a scissors, and may be obtained in many weights. Other inexpensive materials may be combined with paper, particularly string. I use string in a wide range of color and this adds color interest, as well as giving the design a line pattern.

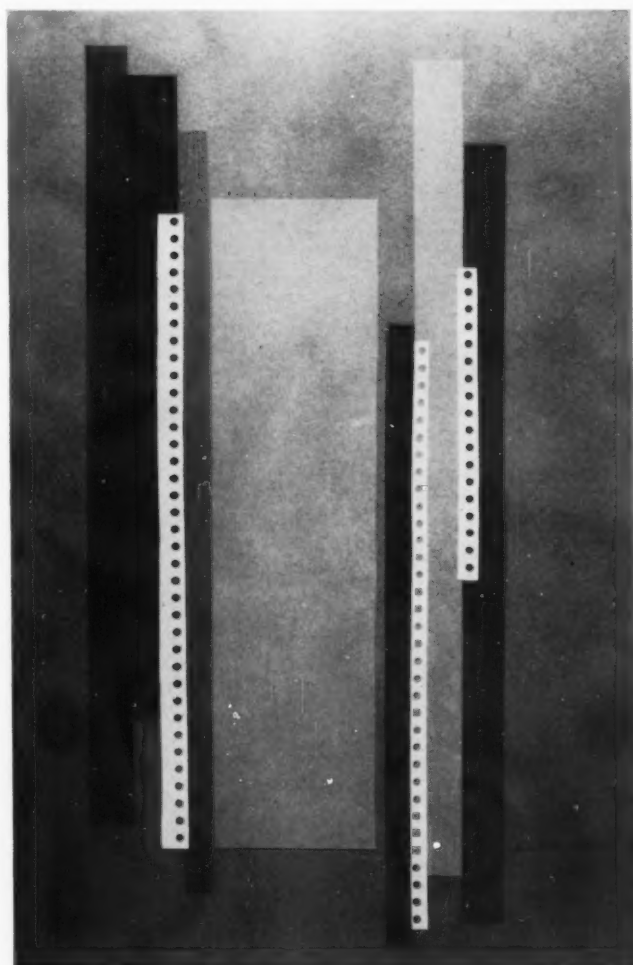
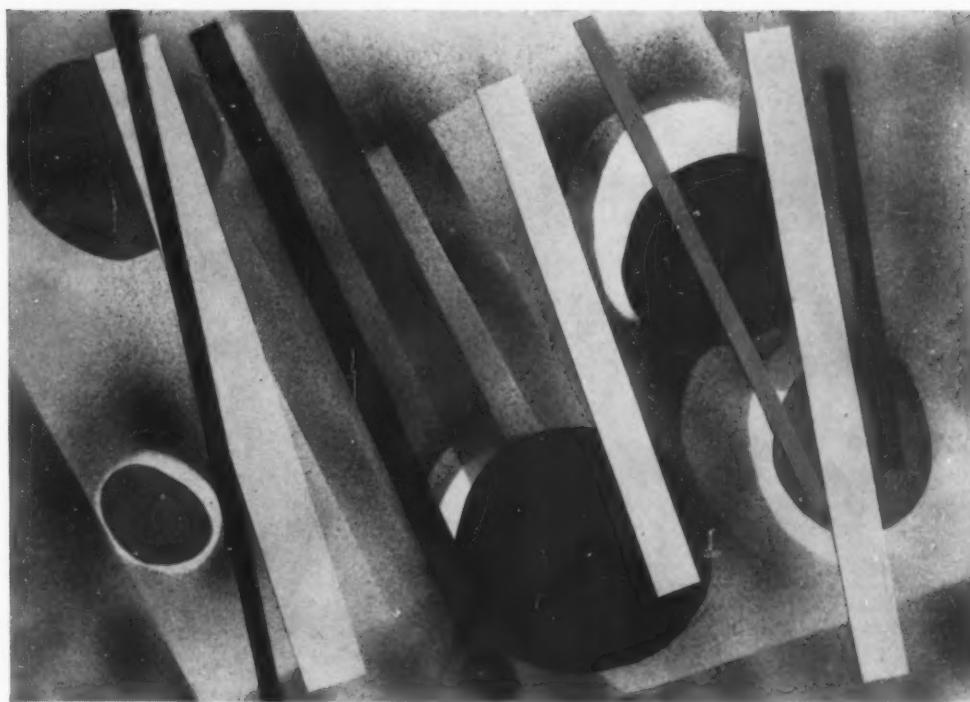
The problem of construction is a simple one, but important, as the method of construction is always a basic factor in three-dimensional design. As in all designs made from materials, the method of construction most natural to the material is best. Certainly paste is not the right answer, and pins and thumb-tacks are no better. A little thought will lead to the conclusion that nothing is needed but the paper itself, which can be slit and put together so that it holds firmly. Whether the whole pattern is cut from one piece of paper, or whether it is a complicated affair of different colors, the whole thing can be firmly put together without artificial means.

We often use these paper structures as models for the drawing classes. In white, every shadow can be clearly seen; the student has a good problem in design as well as drawing, and is not confused by subject matter. As a design problem, it aids in developing ingenuity, in a feeling for form and space, in proportion—in fact it is a good problem in basic design.

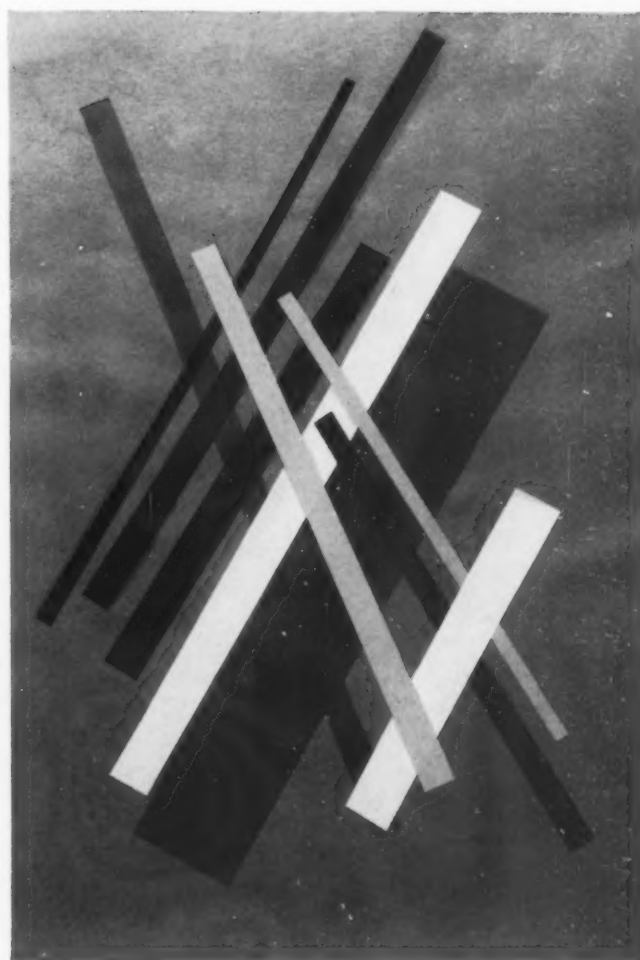


## VOLUME DESIGN

Cut paper and spatter gun are combined to give a feeling of depth. Each value forms a balanced pattern in the design area.  
Tom Sullivan



A problem in proportion and balance. The use of cut paper is good in such abstract problems, as it can be shifted about until a satisfactory arrangement is found.  
Tom Sullivan

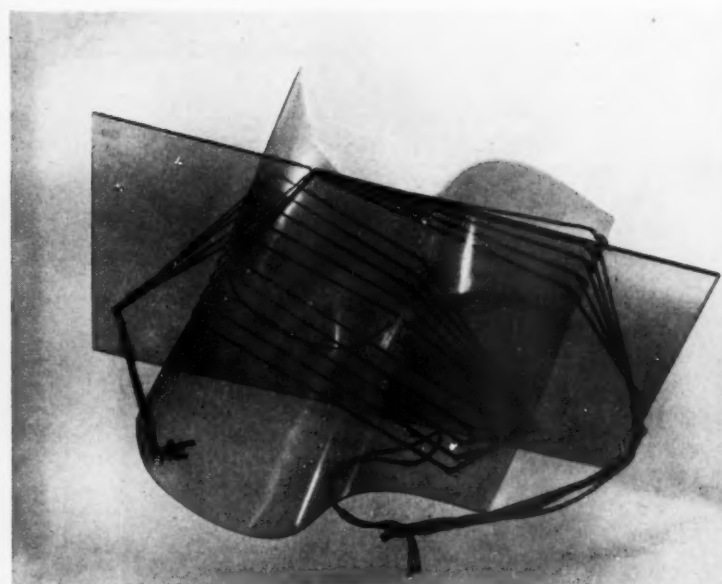
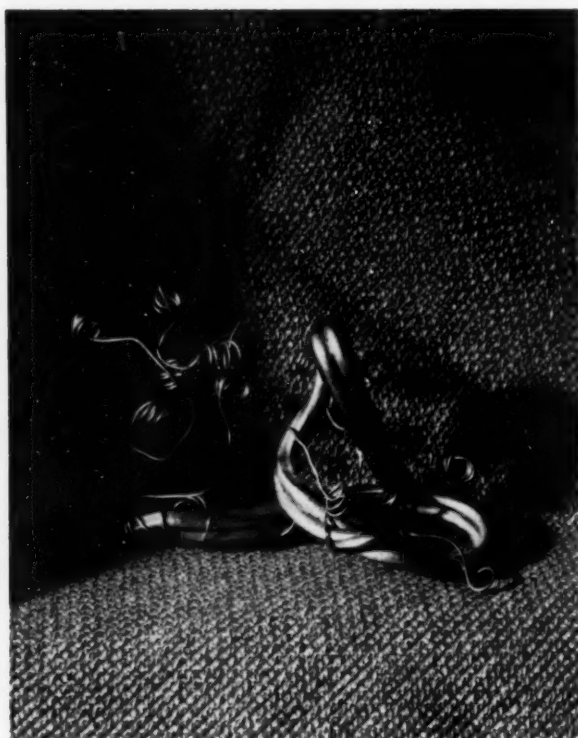
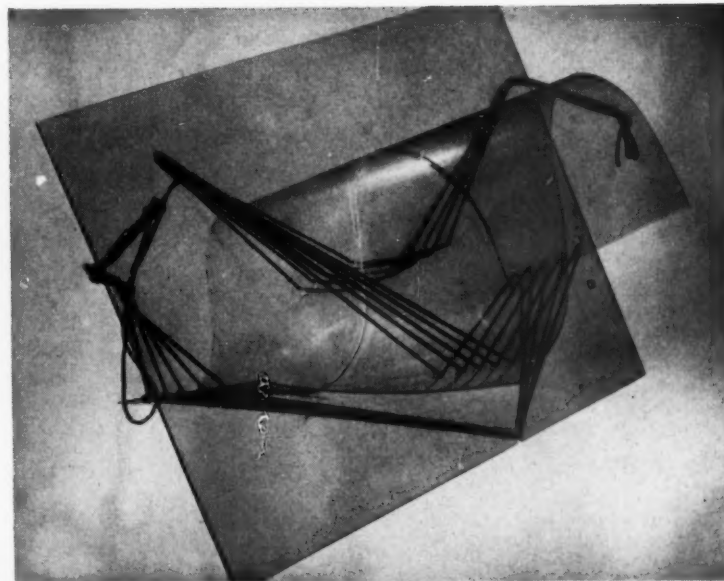


A composition of opposing lines in cut paper. Variation in spacing, balance of light and dark, and grouping to form an area of dominance are carefully worked out.  
Tom Sullivan

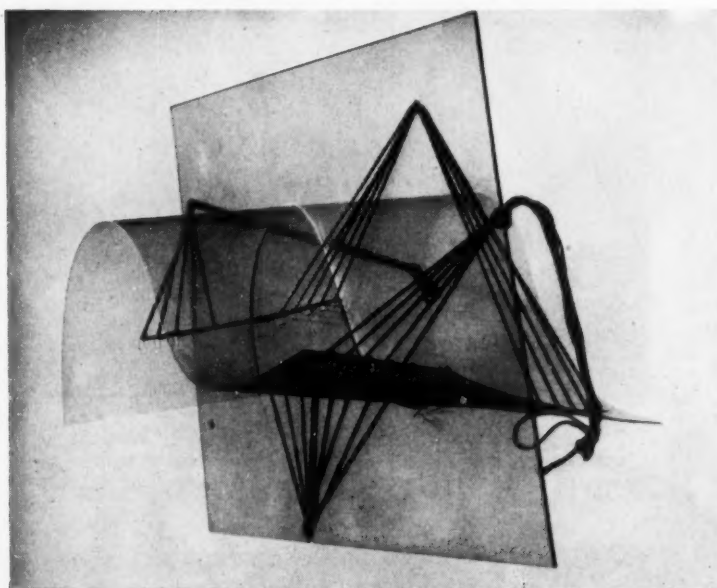
# VOLUME DESIGN

HELEN WANN ANNEN

Associate Professor of Art Education  
University of Wisconsin, Madison, Wisconsin

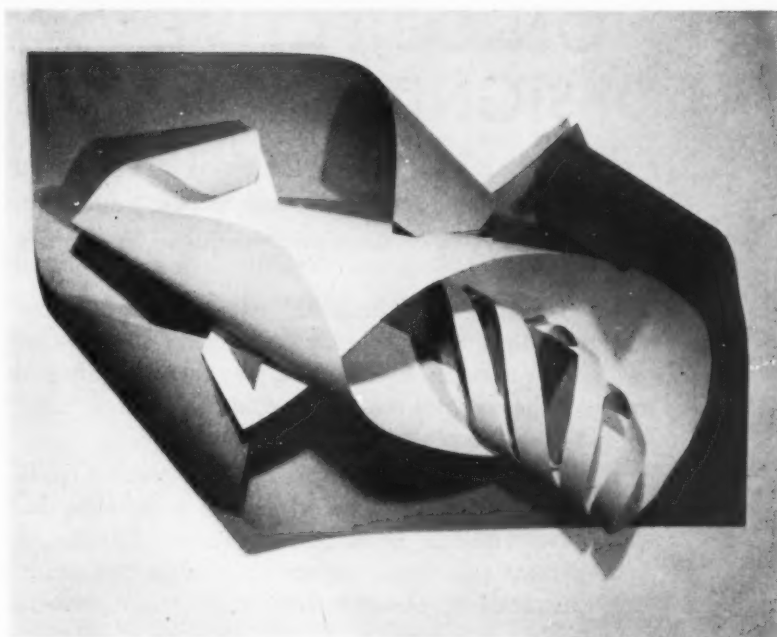


Abstract sculpture in wire. Familiarity with a wide range of materials and techniques is indispensable in design. James Storey



A plastic transparency, with a line pattern of interweaving cord. It may be used standing or hanging. Mary Ann Ackerman

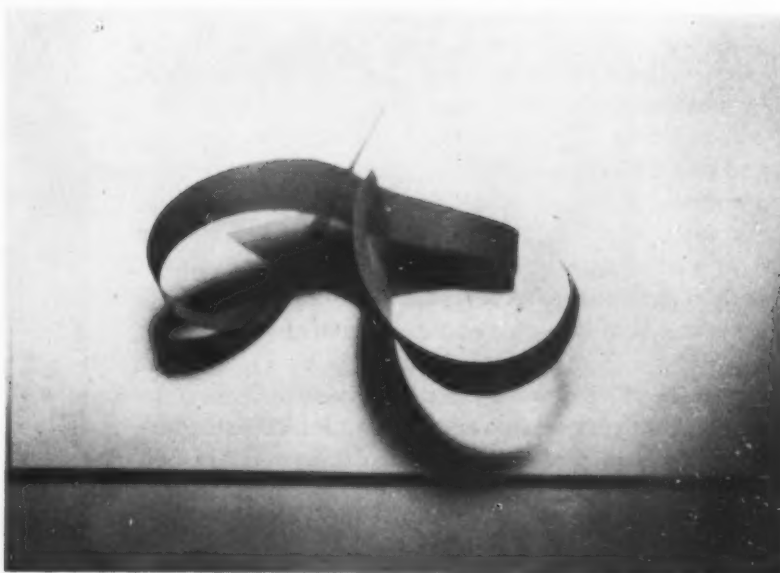
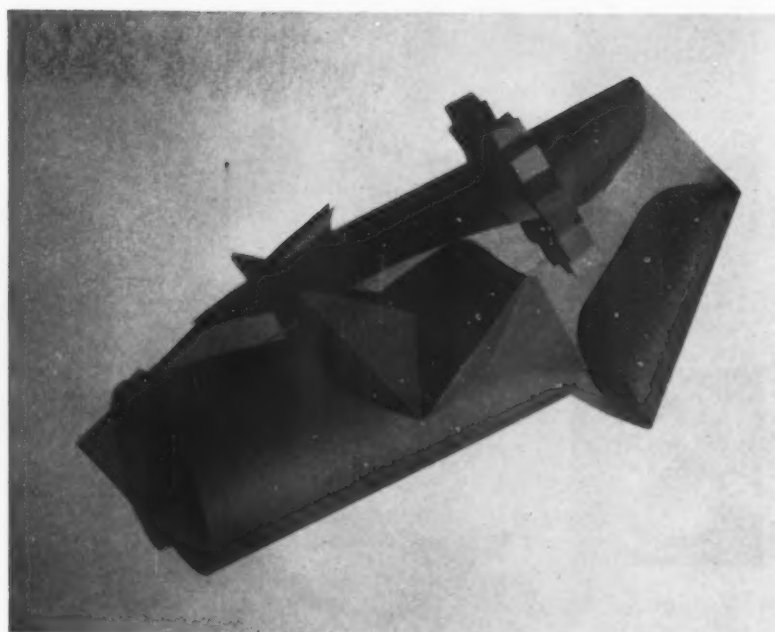


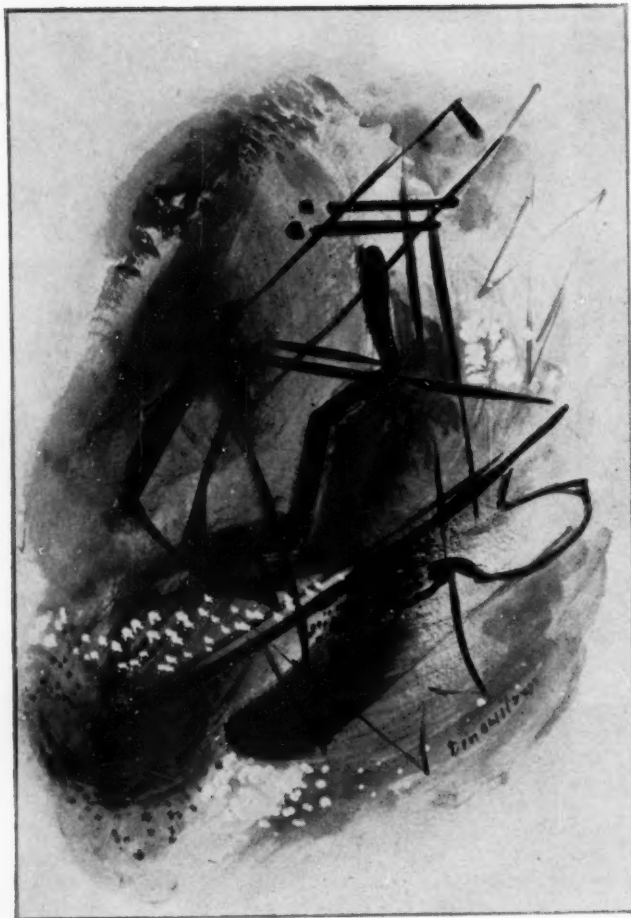


## VOLUME DESIGN



Three dimensional arrangement in cut paper





Free treatment of line, color, and texture. The brush and pigment have taken control and the pattern fits them perfectly. Shirley Dinowitz



OME twenty or thirty years ago, the teachers and students of design had a simple, easy life, happily conventionalizing plant and animal life, and fitting natural forms into geometric shapes with little regard for any guiding principles whatever.

Today, the whole field of design has become so complicated that only a mental giant can be a good design teacher, with a fine understanding of aesthetics, functional design, techniques and materials, sculpture and painting. Such basic principles as "form follows function," and "pattern is determined by material and method" are commonly used.

A significant trend is toward a merger of design and painting. The design teacher of the past could say definitely that decorative design had certain aims and laws, and that painting followed other precepts. A jury of a painting exhibition today can make no such distinctions. Many paintings, such as the arrangements of verticals and horizontals by Mondrian, seem to be pure pattern. Paintings by Picasso and Braque have been woven into tapestries, and the water colors of Dufy have been admirably adapted to textiles.

The disregard of realistic proportions and perspective, the free use of color, and even the total absence of representation that have been the prerogatives of designers from the earliest times are now being

## NON-OBJECTIVE DESIGNING

HELEN WANN ANNEN

Associate Professor of Art Education  
University of Wisconsin, Madison, Wisconsin

adopted by painters. Indeed, it seems that in these confused days, the designer is gaining prestige as the painter loses it. The camera may take the place of much of the work of the representative painter, but it cannot take the place of the designer.

Problems based on principles, rather than on traditional forms, may be used to form a foundation for any phase of design, whether decorative or functional. Whether we call these patterns non-objective painting, abstractions, abstract design, or pure pattern, makes little difference. To the teacher of design, they are a potent means of developing good designers and of applying the principles of good design, unhampered by the limitations of subject matter or function.

Another advantage is the adaptability of abstract designs to all sizes and ages, and to all levels of ability. A three-year-old visitor in my design classes at the University of Wisconsin painted them for days, mixing colors and devising forms and textures for days on end. High school students find them as enthralling as college students, and the same approach can be used for both.

While many students can always find a motif quickly around which to build a pattern, others need a starting point—some shape or combinations of the elements of design to give their creative imaginations a start. These are some of the ways that can be used to stimulate a lethargic designer: A spatter of paint on either wet or dry paper, a flip of the brush, or a drip of paint, assisted by tipping the paper in different directions. Freely cut paper forms may be used singly, or superimposed. The variety of textures to be obtained from the handling of a brush is almost unlimited, and a textured surface may well serve as the beginning of a complex unit. The use of the spatter-gun or toothbrush, of brushes of different sizes, hair, and shapes, and of a variety of papers will help in the study of texture. Combinations of transparent and opaque paint, of chalk, crayon and ink with paint will widen the range of technical skill.

While these rather accidental tricks of finding patterns and the making of patterns are fun, the design teacher should not forget that they are a means to an end—that of training designers to create intelligently as well as emotionally. Abstractions should never be considered as a hit and miss method of designing, but as a carefully planned organization of art methods according to definite principles.

The building up of a central motif, the subordination of secondary parts of the pattern to the dominant

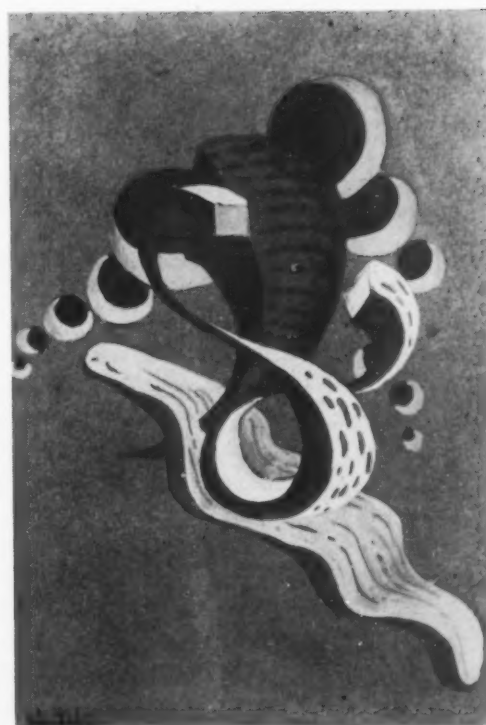
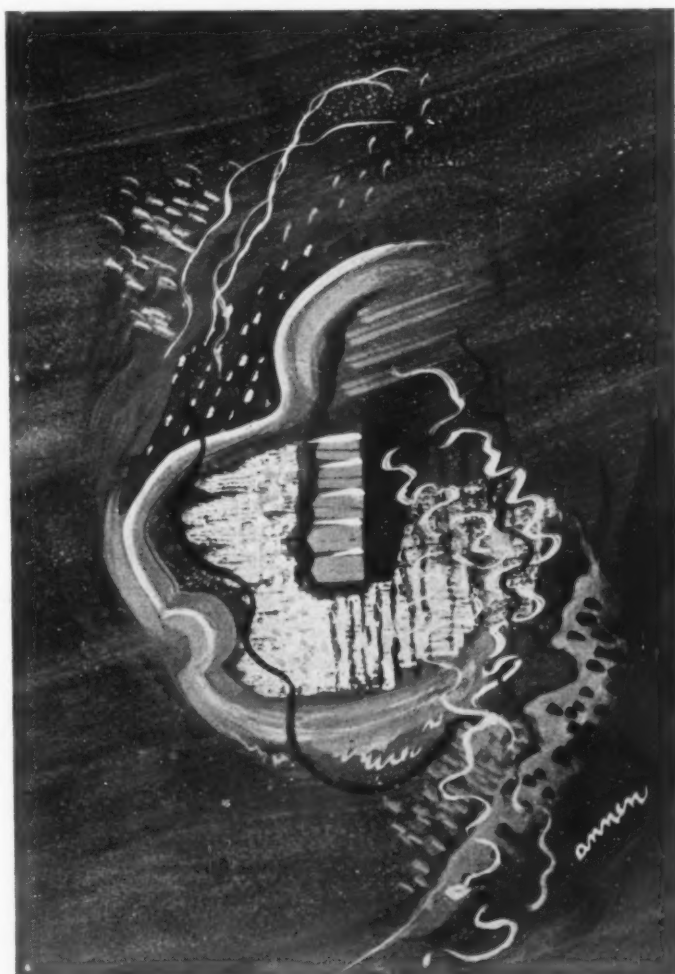


area, the use of such principles as sequence, rhythm, balance, opposition, and the study of color theory and the synchronization of color to pattern are best studied in abstract pattern. I find it invaluable in developing a feeling of textures and skill in brush work.

Best of all, abstractions foster the inventive spirit, help the inhibited, literal-minded student to gain self-confidence, and help toward tolerance and understanding of one of the most misunderstood forms of painting.

Transparent water color  
and spatter gun combined  
with line and texture in  
clear strong color.

Helen Annen



A study in rhythmic three dimensional forms,  
with variation in textures. Virginia Neitzke

An arrangement of textured shapes, in gouache  
with textures gained by  
the use of the brush and  
by thick and thin pigment.  
Helen Annen

# DOLLS CREATED with VARIED MATERIALS

LENORE MARTIN GRUBERT, Flushing, New York



Part of an exhibit of 18,000 rare and unique dolls on display in a New York department store. These four characters have faces made from crabapples. The famous figures they depict are, left to right: Buffalo Bill, Abraham Lincoln, Harry Lauder, and Mark Twain. The quartette is owned by Mr. and Mrs. J. C. Grip of New York City

*Courtesy American Hobby Federation*

**I**F ANYONE questions dolls as a form of art expression, he need only see the Annual American Doll Show given by the American Hobby Federation at Hearns, Fifth Avenue and 14th Street, to be thoroughly convinced of the creative adventures awaiting the doll designer. Although it is fascinating to study the evolution of "ready-made" dolls throughout the centuries, it is even more interesting to see how enterprising persons have created their own style of dolls. Then, too, it is a pleasure to see what interests have challenged these artisans and how they solved the particular problems created by the materials used.

Often an interest in historic costume is the incentive for a study of style throughout the ages, and individuals delight in making dolls which feature dress as it has changed during the growth of civilization. Infinite patience and skill is shown in authenti-

cally duplicating period styles. Many times only scrap material is necessary to produce dolls which are a pictorial history of costuming. The rag doll with a face of finely embroidered features is a favorite prop for costuming.

Character dolls are also popular with the doll designing enthusiast. These may be characters of fiction which capture the personalities of Tiny Tim, Oliver Twist, Alice in Wonderland, among others; or miniatures of authors and poets can almost give life to the creators of our classics; or a retinue of dolls might include such characters as a negro mammy, a charming old-fashioned lady, a graceful ballet dancer, or a disreputable peddler.

Others attack doll designing from an entirely different angle—that being the challenge of material on hand. For example, Mrs. Iva Dinzwil of Wisconsin happens to keep hers on her back lawn. One

A Russian czarina doll stands resplendent in sumptuous gold cloth and jewels. Valued at \$1000. It is from the collection of Mrs. Eveline Maydell, and is on exhibition at the Seventh Annual American Doll Show at Hearn's Auditorium, Fifth Avenue and 14th Street, New York City. With the doll is Marguerite Devine of 98 Dwight Street, Brooklyn, N. Y.

*Courtesy American Hobby Federation*



Rozsika Peterson stands with a doll portrait of herself and another of her sister Solveig at the Seventh Annual American Doll Show, Hearn's Auditorium, Fifth Ave. and 14th St., New York City. The dolls were designed by Rozsika's mother, a noted costume designer, and her aunt, Ilonka Karesz, a well-known artist.

*Courtesy American Hobby Federation*



Richard Erickson, 14-year-old school-boy of West Springfield, Mass., shows a prize-fighting group of lobster dolls from his amusing collection in the Seventh Annual American Doll Show, Hearn's Auditorium, Fifth Ave. and 14th St., New York City.

*Courtesy American Hobby Federation*







Dolls created by  
Mrs. J. C. Gripp,  
Manhattan  
Courtesy  
American Hobby Federation

day she considered the left-over wax from her hives, rendered it, and proceeded to make dolls from it.

In somewhat the same manner, Mrs. Hazel Erickson from Massachusetts decided to use the easily obtainable lobster for the making of dolls. From the large lobster she has designed all sorts of characters—Indians, prize-fighters, pirates, etc. The lobster claws are used as arms and feet by wiring these shapes to a main trunk. Significant details as feathers, caps, etc., are added to contribute a part to the characterization. These present a very original type of doll. The nature of the material tends to create a weird and mean type of figure which is nevertheless very amusing.

Nuts have been put to very clever uses in the construction of dolls, but there is always room for adaptations and improvements. Daisy Welsh of Pennsylvania makes small family groups of peanuts and walnuts. In her figures, she uses match sticks for arms and legs. The charm of these tiny dolls cannot be denied and they'd readily gain a place among collectors' items.

While the above mentioned dolls are unique, the dolls made by Mrs. J. C. Gripp of Manhattan are truly a new innovation in design. For the faces of quaint old men and women dolls, she uses dried apples, dehydrated, carved, and treated to last permanently. Naturally these dried apples create a perfect impression of old, withered skin. As the apples dry, cheeks and chins seem to form as if by magic and the designer need only look for them to place them in their appropriate position in relation to the features.

As for the more common materials for doll designing, yarn offers an ever-workable medium. Braided

arms and legs offer one variation and pompoms can be used for hands and feet. Although socks have been used for dolls for years, they too can be treated in original ways to make novel creations in dolls.

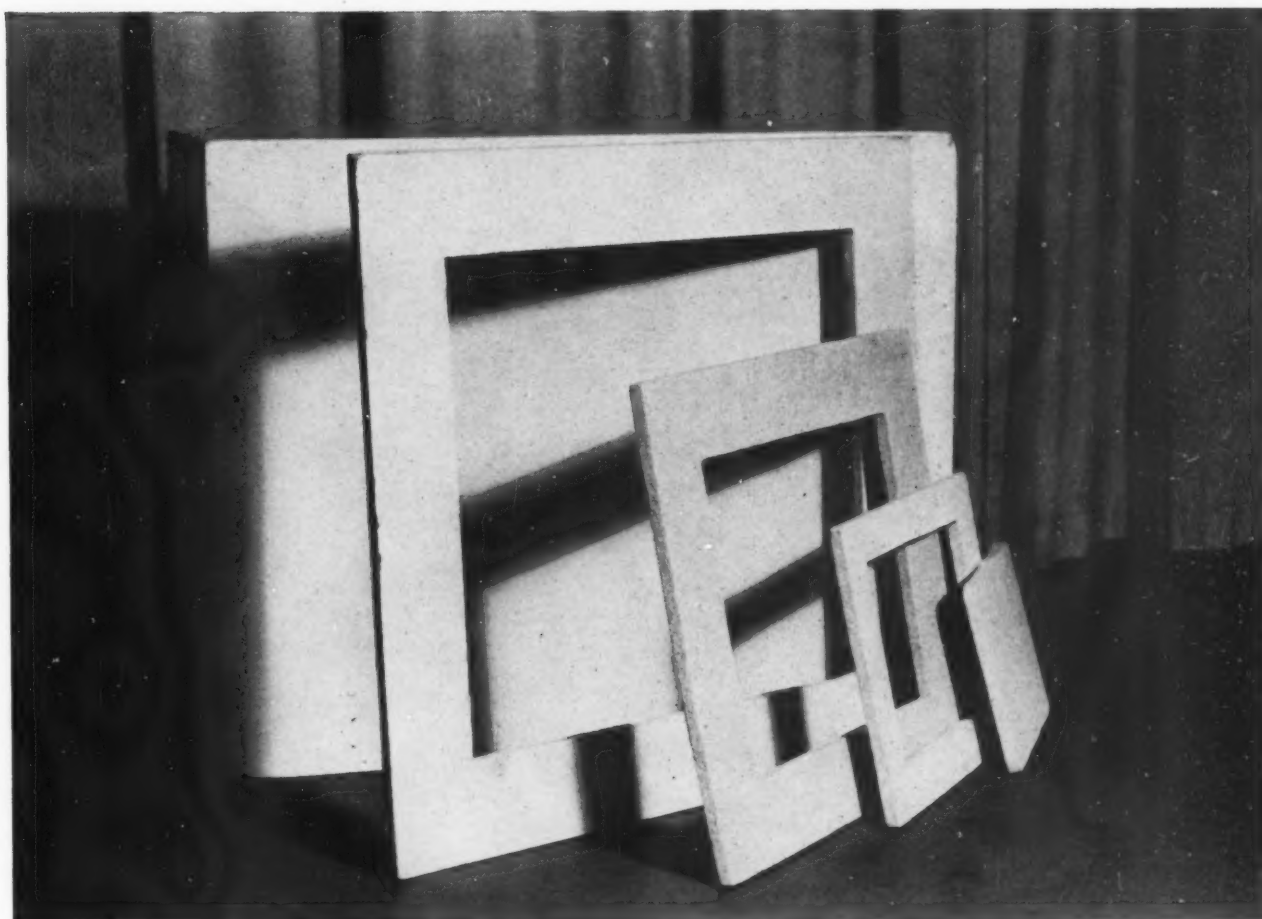
Lapel pins which have been so popular during recent years often take the form of miniature doll creations. An unusual style, seen at the Hearn exhibit, could readily be used as a lapel decoration. This doll is made from a single length of wire twisted into the form of a figure. The frame—arms, head, trunk, legs—is completely wound with yarn. After winding, the figure is dressed with yarn and pieces of cloth. The head can be fashioned in any manner creative ingenuity can devise.

A tiny lapel pin can be fashioned from a corsage or a small-headed hatpin. Features of a face are painted on the head of the pin. Wire is wound around the stick of the pin to form legs and arms.

Seashells afford a splendid medium for tiny dolls. The form of a shell can become both a bonnet and face. Pipe stems lend themselves as arms and legs.

Because dolls have an ever-present appeal to youngsters and to adolescents, the creative possibilities inherent in their design should be considered as a fertile field for art work. The fun afforded pupils in creating dolls just for pleasure or to enrich educational study should not be neglected.





## EXHIBIT FRAMES

JANE REHNSTRAND

State Teachers College, Superior, Wisconsin



WELL designed frame increases the beauty of a picture. Artists have spent much time, energy, and expense on reconditioning old frames and designing new frames to fit the needs of individual pictures.

The frames pictured above were constructed of Celotex. They are a fine substitute for wooden or plastic frames and are especially usable for exhibition purposes, and also projects where glass does not have to be used.

Celotex may be obtained from any builders supply company. It is furnished in pieces four feet wide and any length up to twelve feet and three-fourths and one-half inch thick.

There is no waste in cutting out the frames as may be seen in the photograph. These three large frames may be made for about thirty cents.

The soft edges of the Celotex may be filled with a coat of paint or shellac after the rough edges have been sanded.

Celotex may be painted with water color, show card or oil, if color is needed.

The gray and tan surfaces of this material are excellent backgrounds for paintings.

# PAPIER- MÂCHÉ on DISPLAY

Out of papier-mâché you may evolve any number of attitudes, giving them expression in wit, whimsicality, satire, irony. A fascinating medium, it requires little expenditure for basic materials which consist of wire screening, wire, a paste solutions and plenty of paper.



*Three Lions, Photograph, Pickow*

The screening has been cut to measured proportions and nailed to a baseboard. Student places board in screening, shaping it into cylinder for neck. Profile of face is indicated

Ballet dancer takes a bow. Basic figure is made of paper applied strip on strip until the desired form is achieved. Her costume consists of paper doilies, cheap lace and some gauze.



This set illustrates part of a Display Course given at Cooper Union, in New York City's downtown Manhattan section, and conducted by Erica Gorecka Egan. The students are taught to make all kinds of display figures of all kinds of materials. This series deals with papier-mâché, which lends itself peculiarly well to achieving expressive forms and shapes. Each student endeavors to express some attitude in life. The figure size can be made from nine inches high to six feet, lifesize or larger, provided a sufficiently strong framework is built as a base. The pictures demonstrate the various phases of this medium leading up to the completed figure.



# GLASS CARVING

(Three Lions)

A detail is given the finishing touches with a hand-grinder.



A Greek god rides a fiery horse in the elaborate and beautifully carved motif



MONG man's most versatile creations is glass, serving many and diverse purposes of a practical and decorative nature. A highly skilled art, men have devoted a lifetime of study to its technique.

This picture series concerns David M. Harriton, a native New Yorker, who brings to the art of glass carving an impressive background of knowledge and aesthetic awareness. First studying at National Academy of Design, Art Students' League, Beaux Art School in New York, he extended his study of glass techniques throughout the United States and later in northern Europe. A master craftsman, he lectured at Yale University and New York University School of Architecture, as well as at kindred professional groups.

In recognition of his artistic contribution to glass carving, Mr. Harriton was awarded the gold and silver medals at the 1937 Paris Exposition for work that he exhibited at the Paris Fair. He is a fellow of the Society of Designer-Craftsmen, and its President at this time.

David M. Harriton's work is widely represented throughout the country, including among other places the Federal Reserve Building and the National Airport at Washington, D. C.; St. Thomas More Chapel in New Haven; *S.S. America*, flagship of the U.S. Line; Matson Liners in California; Swedish-American Line; New York Central Railroad; Pennsylvania Railroad; and the Burlington Zephyr. One of his highly prized antique mirror tables is the cherished possession of the Duchess of Windsor.

# HOBBY TILES

NELL RANDOLPH  
Long Beach, California



TILES are so fundamentally simple in shape and design that either the doodler or the artist in making them may satisfy his creative urge. Carol Janeway gives an admiring—and moneyed—clientele her perfectly executed fantasies in tile. Then a third-grade class completes a tile fountain for a mission patio in its work unit, each child making one tile. Pure enjoyment is the common denominator.

Hobby tiles, for which directions are given below, paint pictures of special interests and abilities. A very different touch is added to each individual tile with the signature of the person about whom the creation centers.

These things are needed for inexpensive tiles which have a professional touch:

1. Red clay (1 pound will make two tiles)
2. White slip, the consistency of thick cream. Just a cupful of this will do for several tiles\*
3. A very fine water color brush
4. A paring knife
5. A smooth, heavy board or slab for wedging
6. A canvas-covered board about 6 by 12 inches, with  $\frac{3}{4}$ -inch siding on three sides, leaving one end open. Potters call this a tile board
7. A rolling pin
8. Pencil and paper
9. A ruler
10. A small sponge

The twelve easy steps in hobby-tile making are these:

1. On a five-inch square of paper draw or trace a picture of the hobby you want to portray. For a philatelist an outsize picture of one of his prize stamps may suggest itself. A musician will appreciate a conventionalized picture of his instrument, while yachting, small boat sailing, and all sports offer fascinating pictures. The hobbyist's signature should be ready at this stage, too.

2. Wedge the wet, red clay which should be of the consistency of thick dough. Wedging is picking up the clay, a small, egg-sized lump at a time, and throwing it with force on the wedging board. This is to remove air bubbles from the clay, which might cause breakage if the tile is fired.

3. Pack the wedged clay onto the tile board, a small piece at a time. Push it hard with moistened

fingers, filling the board to the tops of the siding. Then roll the mass smooth with the rolling pin. Smooth it further with moistened fingers or a small sponge.

4. With a ruler score the clay on the tile board into five-inch squares. (A board of the size mentioned above will contain two five-inch tiles, with slight margins for greater ease in scoring and removing). Cut the tile through to the board with the paring knife.

5. Remove the tile squares with spatula, taking care not to pull them out of shape.

6. Lay the tile right side up on a flat, smooth surface. Potters use flat slabs of plaster called bats.

7. Smooth the corners and edges of the tile with moistened fingers or sponge.

8. Place your five-inch-square pattern over the tile. Trace over the pattern with pencil or wooden skewer so that a definite imprint is left on the clay. Remove the paper.

9. Follow step 8 with the signature traced in the same manner. (This may be included in your pattern square.)

It isn't necessary to fire tiles. For three years I have had in daily use as a tea tile one which was decorated with poster paint, sun-baked, then shellacked. Firing does add greater beauty and durability, however. If you want your tile fired, it is necessary to follow through with the remaining steps:

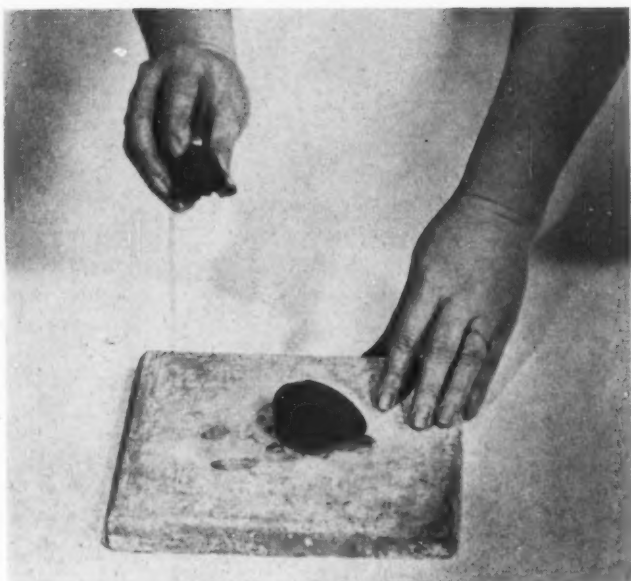
10. With the fine water color brush, outline the hobby picture, using the white slip as paint. Varied colors of glaze may be used, but white is much the simplest, and is especially effective on the red clay.

11. The tiles must be set aside to dry for a week. Turn it daily to prevent warping.

12. The potter will fire the tile twice. Before the second firing he will dip it in a clear glaze which adds the smooth sheen of the professional touch.

The finished product makes a flattering gift as a wall plaque, tea tile, or perhaps an inset for barbecue or coffee table. But the greatest dividend paid is the sense of self-expression and accomplishment for even the most unskilled fingers.

Note. Recipe for white slip, if unobtainable already mixed from potter supply: 1 quart water,  $\frac{1}{4}$  teaspoon waterglass,  $\frac{1}{2}$  teaspoon sal soda, 6 pounds white slip clay. Mixture must be beaten with egg beater or mixer until absolutely free from lumps. This makes a large amount of slip, but it keeps indefinitely, even improving with age, if kept tightly covered.



WEDGING THE CLAY. Throw the clay *hard* on the wedging board



SCORING THE CLAY. Cut into five-inch squares



PRESSING THE CLAY ONTO THE TILE BOARD  
Press clay vigorously and solidly



TRACING THE PATTERN. Leave a definite imprint on the wet clay



ROLLING THE CLAY WITH ROLLING PIN



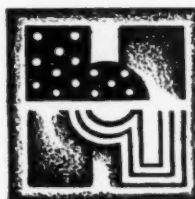
OUTLINING THE HOBBY PICTURE. Use fine water color brush and white slip for this, filling in all detail in firm white lines on the damp, unfired tile



# FUN WITH SPOOLS

CAMILLA WALCH WILSON

Sedalia, Missouri



HERE are a number of things you can make of empty thread spools. Assemble all available sizes of spools, including the large ones used by tailors.

Figure 1—*Doll house furniture.* One whole spool for the table, a half spool for the stools. Make six stools from three spools if you like. Decorate the spools with crayons or paint. Cut a circle of cardboard and glue it to the top of the whole spool for a table top. Tiny cushions for the stools and the wee-est of fingernail polish bottles for a vase on the table will look very nice. If you are not good at sawing wood, practice a bit as you want the stools sawed exactly right.

Figure 2—*Candlestick for your doll house, play house, or to use as individual candles to encircle a birthday cake.* Decorate the candlestick spool as it is in the illustration, or better still, make up your own design. Use the tiny birthday candles ordinarily sold for birthday cakes, to put in the spool opening.

Figure 3—*Party favor.* Select a sewing thread spool about Number 40. Measure a strip of crepe paper the length of the spool and long enough to make a very full ruffle to be gathered through the center. Do the gathering with a needle and thread on a guide line marked through the center of the paper. After you hold the paper in place and it seems very full and pretty, draw up the thread tightly and fasten it. Tie a ribbon around the gathered part and make a bow. Carefully ruffle the edges of the paper between the thumb and finger. Fill the opening in the spool with tiny flowers, fresh ones in season, or use everlasting flowers you may have grown in your own garden. If you have made tiny tissue paper blossoms and pasted them to little twig branches, you will know how to go about filling the spool favors.

Figure 4—*A miniature Colonial lantern.* Color the spool with crayons or use metallic paper. If the paper is used, use silver to cover the center portion of the spool. Measure, cut and paste neatly. Use red for the stripes and the lantern top. Attach a piece of red cord to a circle of cardboard the same size as the base of the spool. Sew through the cardboard, one stitch is sufficient, push the ends through the spool so that they protrude through the top of the lantern, after the top is glued in place. For the top, cut a cone-shaped piece to fit the spool.

Figure 5—*"What not" clown.* One empty spool, a wooden or large imitation pearl, or celluloid bead can be used to make him. Try marking with ink on whatever type of bead you expect to use for the head before you glue the bead to the spool. Mark features, hands, and buttons in ink or paint. Make a tiny cone of bright colored paper and paste it to the top of the bead head for a cap. Color the spool clown suit and the top in contrasting colors.

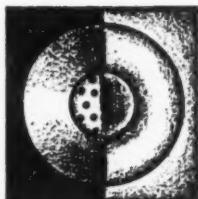
Figure 6—*A light or curtain pull.* Decorate with colors to harmonize with the color scheme of your room. Knot two cords and fray the ends like a tassel. String a bright bead on the cord, next the spool, then another bead. Tie the ends to the light chain or curtain pull.

Figure 7—*Place cards for a boys' club party.* Saw spools in half; make slits with a sharp knife, being careful of course. Guest's names are written on very small cards and pushed into the slits. Use your class or club symbol as a decorative design. Use paint or crayons for the coloring.

# OUR BAND PROJECT

EMMA NETTLETON

Detroit, Michigan



OUR school is in a hospital and our pupils are convalescents, ranging in ages from 4 to 16. Besides regular schoolwork, we have art and handcrafts. Making usable articles out of scrap materials has provided us with much fun. The children have devised many new projects from this. Some of the scrap materials we have used are: old x-ray films, oatmeal boxes, orange crates, old greeting cards, bits of yarn and string, newspapers, magazines, old sheets, cardboard, adhesive tape boxes, burlap, old felt hats, tongue depressors, tin cans, and other scraps.

The project that the children enjoyed most was making a set of instruments for our kindergarten band. This consists of cymbals, drums, sticks, triangles, horns, tom-toms, tambourines, and bells.

The cymbals were made of two 6-inch tops of Pabulum cans, large size. These did not need cutting but we added handles of dowel sticks about three inches long. These were rounded at the ends and painted red with oil paint.

Then in the laboratory we found a box like a hat box, but stronger. The top and bottom were removed and we stretched pieces of old chamois over them. With painting and decorating in real Indian style the drum was perfect. Show card color and shellac completed it. The first drum was such a success that others were made from different types of boxes. Some pupils cut pictures of Indians and cowboys and pasted them on the sides of their drum.

From the carpenter shop we obtained two 8-inch lengths of dowel ( $\frac{3}{4}$ -inch). These were sandpapered and added to our band.

Tom-toms were fun! Each child had his own idea of how they should be made. Some were of ice cream cartons with a handful of fine sand thrown in. Others had gravel to produce a different sound. Pictures cut from greeting cards were pasted on edges, and some added handles to their tom-toms.

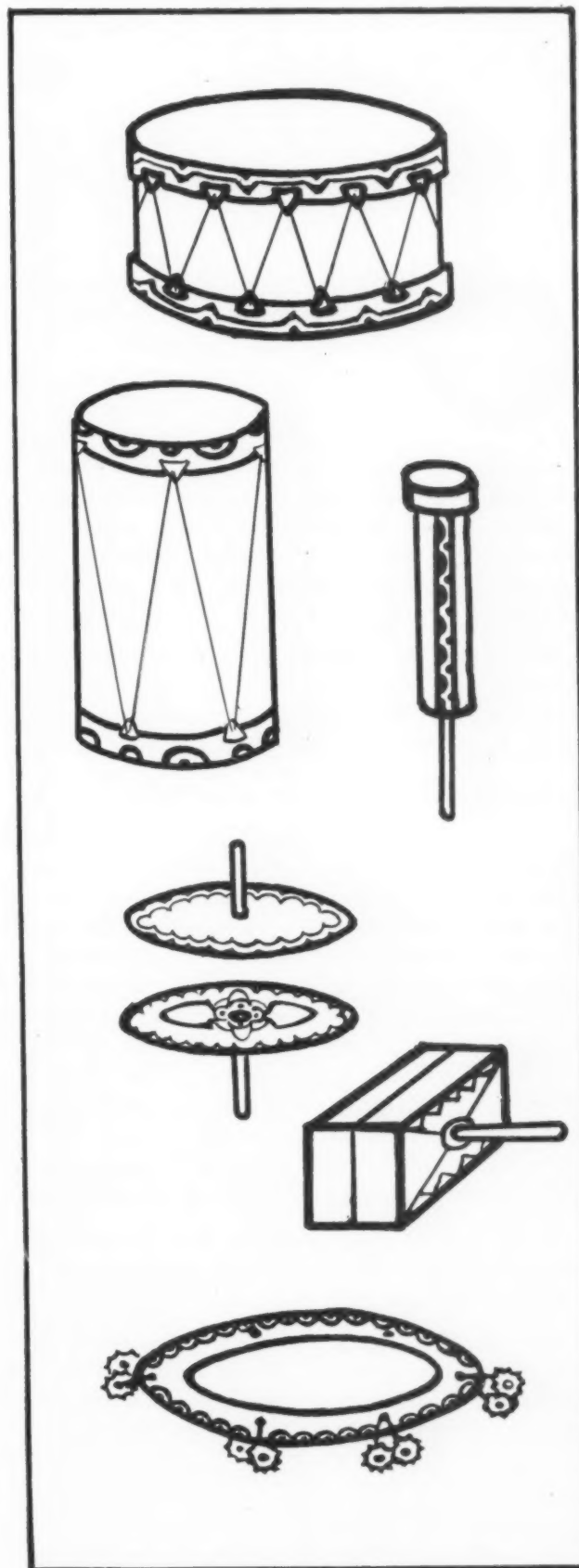
Our tambourines were also satisfactory. They were of a medium-sized paper plate with a picture from a greeting card pasted on one side. For each tambourine we used two plates, six holes being punched along the edge of each. Pop bottle tops put on with paper clips in these holes were loose enough to jingle. This instrument was shellacked several times.

From cones left from crochet cotton we made horns. Each child decorated his horn to suit himself. From a roll of carpet warp we kept the tube and used it for a horn, but holes were bored in it to make it more realistic.

We discussed each instrument and drew patterns on paper so this project took some time to complete. The best instruments were kept for school use.

Then came the practice periods which furnished us with a great amount of pleasure, recreation, and fun, as well as getting a desire to play some instrument, and an idea of rhythm.

I hope I will be able to tell you of other interesting and different projects we have had.



# MAKE YOUR OWN MATS

BEULA M. WADSWORTH  
Tucson, Arizona



GOOD-LOOKING mats for pictures can easily be made by the amateur without mechanical assistance by making use of thinner material than is employed by the professional framer. Having made my own mats for years

I realize the money saved when many mats are needed. Moreover, that added precious quality and artistic importance given by a mat to the pastel, water color, etching, or blockprint for private or school exhibiting justifies the work and material involved.

The materials needed for this work are white kid-finish bristol board for the mat, light-weight chipboard for the back, and a roll of inch-wide gummed paper tape for the hinges.

The following are the steps of procedure:

1. Lay the picture on the bristol board in order to plan widths of margins. (The dotted line in Fig. 1 represents the edge of the picture itself; the solid line shows the amount of overlap of mat on the picture.  $\frac{1}{16}$ -inch is minimum). One authority recommends as ideal proportions of margins for vertical or horizontal pictures 5:7:11 for top, sides, and bottom respectively. Others say top and sides should be equal but they differ as to how much wider the bottom margin should be. Having made your own decision, measure from the edge of the overlap outward, dot, and draw lines for the outside edges of the mat. Cut out. A draftsman's triangle will help to get corners square.

2. To find the inside opening (Fig. 2) lightly draw lines on the mat near the picture corners horizontally and vertically.

3. Take the picture away and complete the lines to outline the opening (Fig. 3). Erase the outer guide lines. (Etchings and blockprints are usually matted with opening outside the picture space.)

4. Lay the mat on a strip of plate glass—remnant from a glass-cutter's shop. Lay the metal edge of a ruler on the line to be cut. Hold mat firmly in place with one hand, with the other firmly cut along on the line with a very sharp knife (Fig. 4), being careful to start and stop exactly on the corners. More than one trip across may be necessary until you feel the smooth glass. Continue around until the opening is cut out. (It is necessary to keep a piece of fine carborundum at hand to sharpen the knife on frequently.) When a number of pictures are the same size, one mat opening can be drawn through for all the mats.

5. This step is not necessary but it is possible with thin cardboard to bevel the edges of the opening to give the effect of depth of a beveled thick mat. Place the edge to be beveled over the edge of a ruler with the bevel of the ruler down, overhanging it not more than  $\frac{1}{16}$  inch. (Drawing a line for the width of the bevel can be a guide for beginners.) Run the flat of the knife at a slight angle (Fig. 5) along the edge pressing it against the ruler edge, and with diagonal pressure simulate a miter at the corners.

6. Cut the chipboard back the same size of the mat, and then cut gummed tape the length of the top of the mat for a hinge. Double the tape lengthwise with gummed side out. Wet one side and apply to the top of the back. Wet the other side and apply the top edge of the mat (Fig. 6) on to the tape being sure the corners of mat and back are together at the bottom.

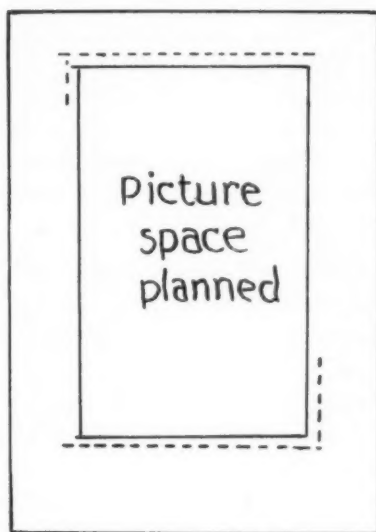
7. Slide the picture under the opening, adjust it to fit, then lift up the mat and mark the top corners of the picture (Fig. 7). Hinge in place as directed above.

8. If title of the picture and name of the artist are to be put on, letter or write the title on the mat at the left just below the picture, and the artist's name likewise at the right.

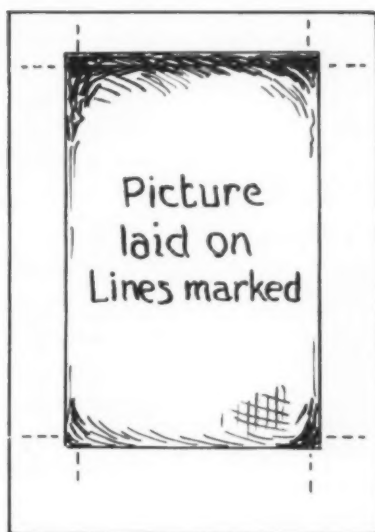
9. There are several ways to hang unframed matted pictures:

- a. Sew a string through the chipboard back near the top and tie it for hanging on a tack or brad.
- b. Lift up the mat and tack the back to a moulding or wall.
- c. If a wire is stretched along a wall, hang the picture by use of small snap-hooks, or open up the mat, slip it up behind the wire and lower again thus hanging by the hinge.

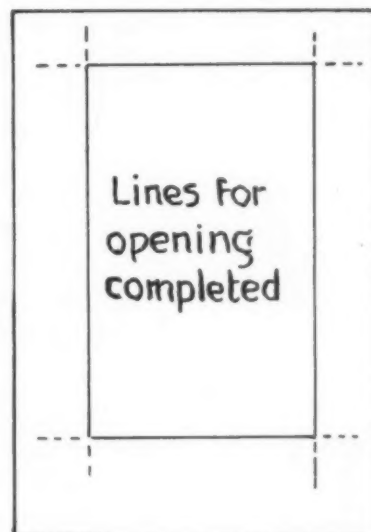




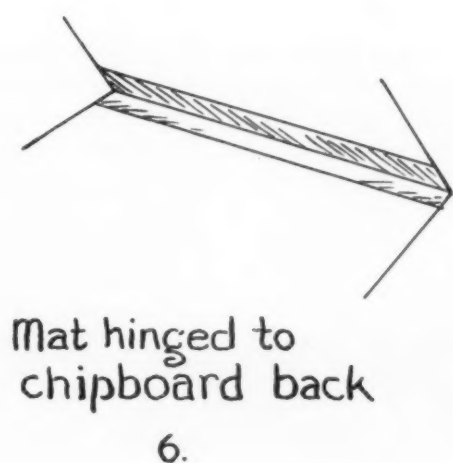
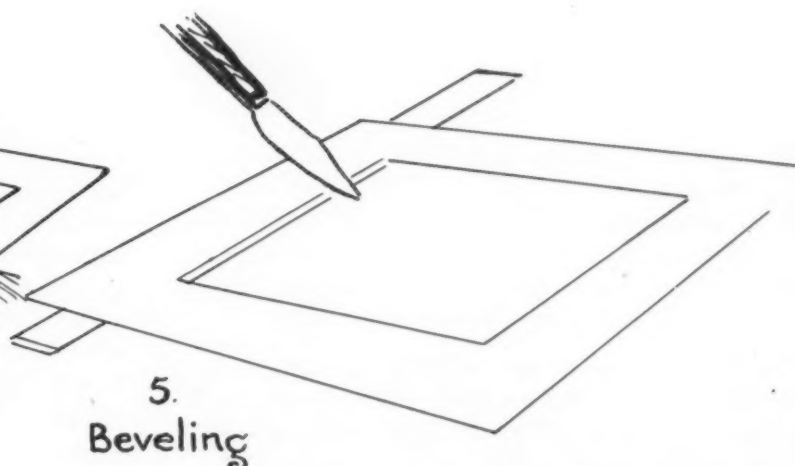
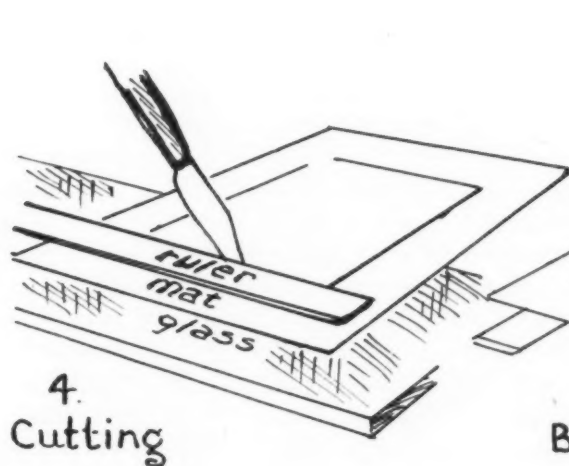
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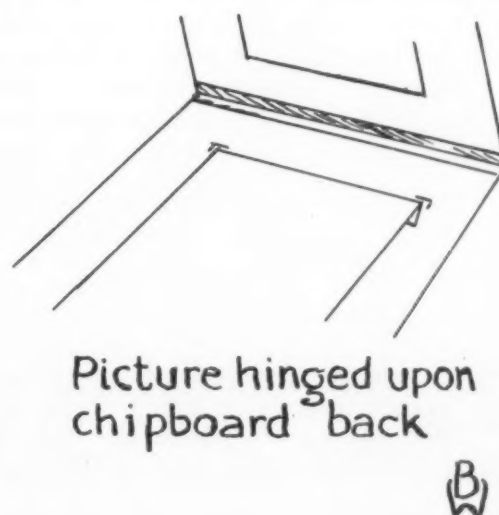
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Mark picture corners

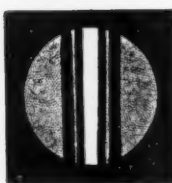


7.



# A JEWELRY PROJECT

HELEN A. HASELTON  
and JOHN D. PREU  
Weaver High School  
Hartford, Connecticut



OVER a period of years our art department has gradually acquired, mostly through the efforts of the pupils themselves, reasonably adequate equipment for satisfying varied tastes in a number of crafts. As a result our art shop now has bench space for a good-sized class with several large fixed vises, movable bench plates, gas connections for annealing and soldering, and a motor for polishing and buffing. Also various tools, such as hammers, drills, files, snips, saws, etc.

One project in jewelry that has been, and still is, very popular is a "bangle bracelet." Fortunately, until the recent difficulty over the silver bill in Congress, we have been able to buy sterling all through these past war years when copper, pewter, brass, aluminum, etc., were completely off the market.

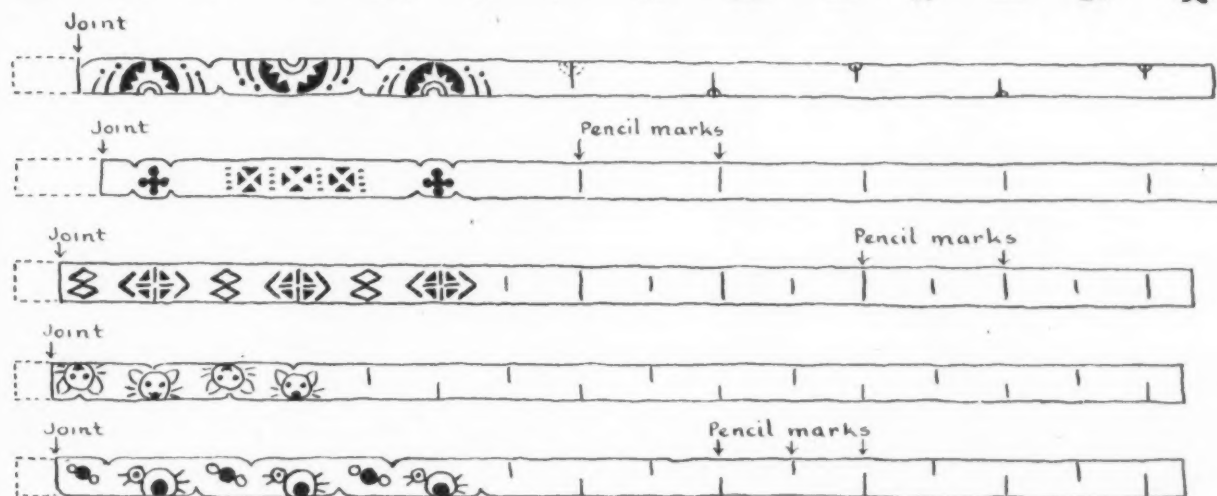
We use eighteen-gauge strips a quarter of an inch wide and eight inches long, which we decorate and then hard solder into hoops. A valuable part of the problem in planning the design is to see that there will be a continuous rhythmic repeat after soldering. However, the real challenge comes in making use of a comparatively few steel stamps, cutters, dappers, etc., in combination for an infinite variety of units. Some groupings are enriched by edge filing at intervals.

To increase our supply of stamping tools while it was almost impossible to buy them, we purchased a sheet of ground stock suitable for tool making. It measured three by eighteen inches and was a quarter of an inch thick. The boys in the machine shop cut this into quarter-inch pieces. After annealing them we made many different designs by filing or drilling one end with great care and patience. We hardened and then tempered them to the proper deep plum color with a good Bunsen burner and a pair of annealing tongs.

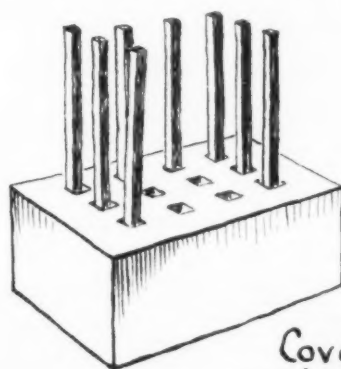
The actual execution of the bracelet proceeds in this manner: The edges of the silver strip are filed and it is annealed. The intervals for the dominating unit of repeat are marked on it in pencil from a previously planned design, being careful to have the soldered joint occur where it will not distort a unit. We do not attempt to trace these designs as handling would tend to obliterate them, and besides there is usually at first some slight variation in position or direction of the tool. The marked strip is placed on a bench plate while the tool, held in a vertical position, is smartly struck with a good-sized ball peen hammer. It is hit just one good clip as there is a tendency for it to bounce when struck. We find it almost impossible to "re-do" a tool mark without blurring the edges, so we usually practice and try out combinations for designs on scrap metal of any kind, even salvaged tin cans. The hammering has a tendency to harden the metal so that it is sometimes advisable to anneal during the stamping process, and it is always wise to do so before bending into shape as the metal might be brittle enough to break. The bending can be done around a wooden mallet head if a bracelet mandrel is not available. The ends must next be filed for a perfect fit and a clean joint, and a binding wire adjusted to hold them tightly together. Lightly flux the joint and place several tiny pieces of freshly cleaned hard solder on the inside. When properly heated with a blue or white flame on a charcoal block, the joint can scarcely be found.

The bracelet is finally pickled, polished, oxidized and buffed or gently rubbed with very fine steel wool (No. 00). It gives both pleasure and satisfaction to the maker and has doubled or trebled its value.

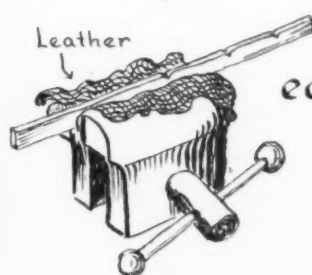




The two top lines show possibilities for making stamping tools. These may be supplemented by using nail sets, center punches, repousse' tools, cutters of varied sizes and even chisels if not too sharp. Tools with the smallest amount of plain surface leave the clearest imprint. The background of the tool should be filed well back and the design edge left clear but not too sharp.



A block with holes slightly larger than the tools is a fine way to keep them while working.

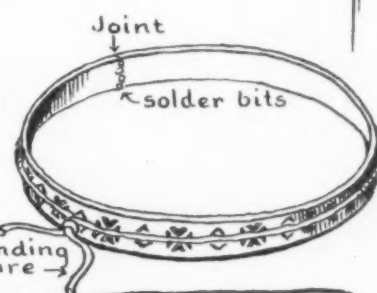


Cover jaws of vice with scrap leather while edge filing.

Bench plate



Hold tool vertically ~ strike with center of hammer.



Binding wire



# AMERICANS AT WORK

Unusual Occupations  
in this Machine Age

*(Authenticated News)*

NEW ORLEANS, LA.—In spite of the planned production of this modern era, there are still numberless Americans who work by hand. Many men and women earn their bread in fields of work that seem odd to the average man. Here, the race is not to the swift, but to the skillful.

Picture shows a woman at work in a field few people are aware of: restoring priceless old flags to their original freshness. Speed means nothing in this work. What matters here is keen observation and patience in matching the old parts of the flag with valuable material, and well-trained hands in embroidering together the old and new sections of the flag.



## EIGHTH GRADE BOYS make scenery for operetta



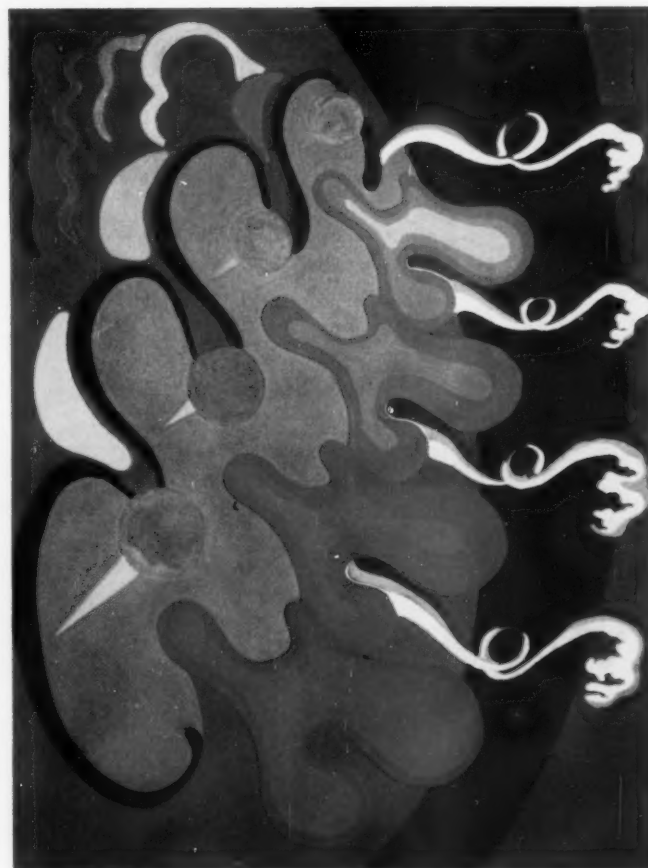
MABEL HOLCOMBE, Teacher  
Troy Junior High School  
Troy, Pennsylvania

Art students of eighth grade are transforming two sheets of wallboard into an orphanage for the stage setting of the operetta "Molly Make-Believe," which was given by the children of grades one to seven.

All posters for advertising the operetta were also made by eighth grade art classes. The boys and girls thoroughly enjoyed helping the younger children with their operetta.



Three dimensional  
figures constructed  
with thin sheets of  
aluminum and  
carved with nails,  
meat skewers and  
orange sticks.  
Used for Christmas  
decorations.



The designs above, excepting the first, are abstract compositions based on the idea that abstract form and colors have the power to express feelings and sensations. These designs were inspired by musical compositions. The violet and pink composition was an interpretation from "The Dance of the Sugar Plum Fairies." The fourth composition was designed from the "Nutcracker Suite." As the student listened to the musical composition he expressed what he felt on large pieces of newsprint paper with graphite sticks. Later these were organized. Designs by Robert Thoorcell, Leora Brunswick, Florence Fowler, and George Angspurger, of Central High School, Superior, Wisconsin. Margaret Rehnstrand, teacher.





FIRST OF SPRING  
An original finger painting by Sara Ravendale  
(Courtesy of Binney & Smith Co.)



Dry brush drawings  
 by Floy Jeanne Benson,  
 State Teachers College,  
 Superior, Wisconsin

# SUSIE BELLE . . . THE EDUCATED GAL

(Correlating reading with Art)

ALDEA K. ROEDER

Associate Librarian

Teacher, Grosse Point High School

Grosse Point, Michigan



CHANCE remark made by a student on a library display acted as a challenge to me. This is what I overheard, "Why are library displays alike? They're never really interesting. I'm tired of seeing book jackets in every size, shape and form."

How true were her statements! Consider, yourself, how many library displays feature book jackets. There is nothing original about them even if they are used in various ways.

After thinking about it for several weeks and looking up material for an appealing display I found an ink drawing which gave me an inspiration. Why not introduce a character who would be lifelike. Make her so unusual that she would draw attention and gradually become part of the student body herself. Her comments would appeal to the students in such a way that they would be learning without being aware of it.

With apologies to the creator of the ink sketch I capitalized on the character. She is an educated colored gal—Miss Susie Belle who likes to read books and have her "say" about them.

"We made her of paper, about three and a half feet tall (to fit in our display case), bow-legged and cross-eyed. She was dressed in a fancy gown of bright red with blue figures. Her sash was yellow as were her gloves and pleated cuffs. Her hat was a lovely creation of lavender with a pea-green band and bow, sporting several richly hued flowers. Her hair was a masterpiece, pure rayon—naturally white and kinky, and was effective against her black face. In her right hand she held the book "Tom Sawyer" and to her left were the comments she made about the book.

As an experiment she was a huge success! We were besieged with requests from students and faculty



to continue with Susie Belle and her "say." As a result our second display was created on "Robin Hood." She was dressed in shades of blue and orange with tan and green, complete with feather, quarter-staff and bow against a background of palm trees and sand.

Again the results were outstanding. We were interviewed by a reporter from the school weekly and had Susie Belle "pose" for the photography club. Requests came in daily for another display.

The third time we featured "Treasure Island." We fashioned Susie Belle as a pirate, complete in rags of purple, pink and silver with touches of green, brandishing a spectacular sword in her right hand and giving her say on "ole John Silver."

To date Susie Belle is as popular as the day she first appeared. Library circulation has increased and English teachers are grateful. Students are no longer bored with our displays.



# A PROJECT FOR COPPER

HELEN A. HAZELTON and JOHN D. PREU  
Weaver High School, Hartford, Connecticut



AN INTERESTING project for copper, that has endless variety, is to use small disks of it for coasters, ash trays, or small candy dishes, and to line them with transparent colored enamel.

It is wise to file the edge of the disk first and then to start shaping it in a hollowed stump end or a sandbag. The amount of depth will be determined by its end use and its size. The basic shape should be carefully planished before the edge is treated by indenting or grooving or filing at intervals.

When the shaping is completed, the inside of the object, to the very edge, is cleaned with half-and-half nitric acid and water. This works very fast and must be done near a sink with copper tongs and paper towels at hand. As an added precaution it is wise to wear a smock or a chemist's apron to avoid damage to clothing. The object should then be thoroughly rinsed and dried, avoiding contact with the hands.

Using a "flit" gun or other small sprayer, we then apply an even coating of gumtrajacanth which we keep on hand for this. The fluid gum is prepared by using one-half an ounce (approximately four slightly rounding teaspoonfuls) of powdered gum soaked in one quart of water and allowing it to stand overnight. Whip it with an egg beater and repeat the next day. It should be the consistency of thin mo-

lasses. A few drops of carbolic acid or other germicide will keep it from spoiling.

The freshly gum-lined dish is then placed on a large clean paper and carefully but thoroughly covered with a layer of enamel. This has previously been carefully ground, washed, dried and placed in a bottle with sifter top. Any moderate sized bottle with a metal screw tap can be utilized by sawing a good-sized hole in the top and placing a piece of 100-mesh brass screening in it. Any enamel particles that fall over the edge of the dish onto the clean paper while sifting, may be salvaged.

If you have no muffle furnace, the enamel can be melted by carefully placing the object directly on a gas burner. Another method is to place it on a tripod with either a good Bunsen burner or a foot-bellows blowtorch below it. Apply the heat until each particle has melted. Allow it to cool gradually.

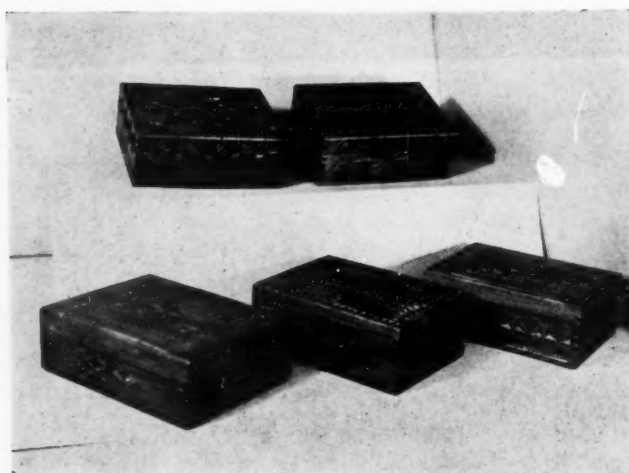
If any specks of enamel have stuck to the outside, or formed lumps or bubbles inside, they may be reduced by grinding with carborundum. This grinding will dull the enamel surface which should be carefully washed and reheated to the melting point. Allow to cool gradually, as before.

The outside can then be thoroughly cleaned and burnished. The polished copper adds a great deal to the "aliveness" of the finished object.

(See illustrations on opposite page)

## CHIP CARVING

JEWEL H. CONOVER, St. Louis, Missouri



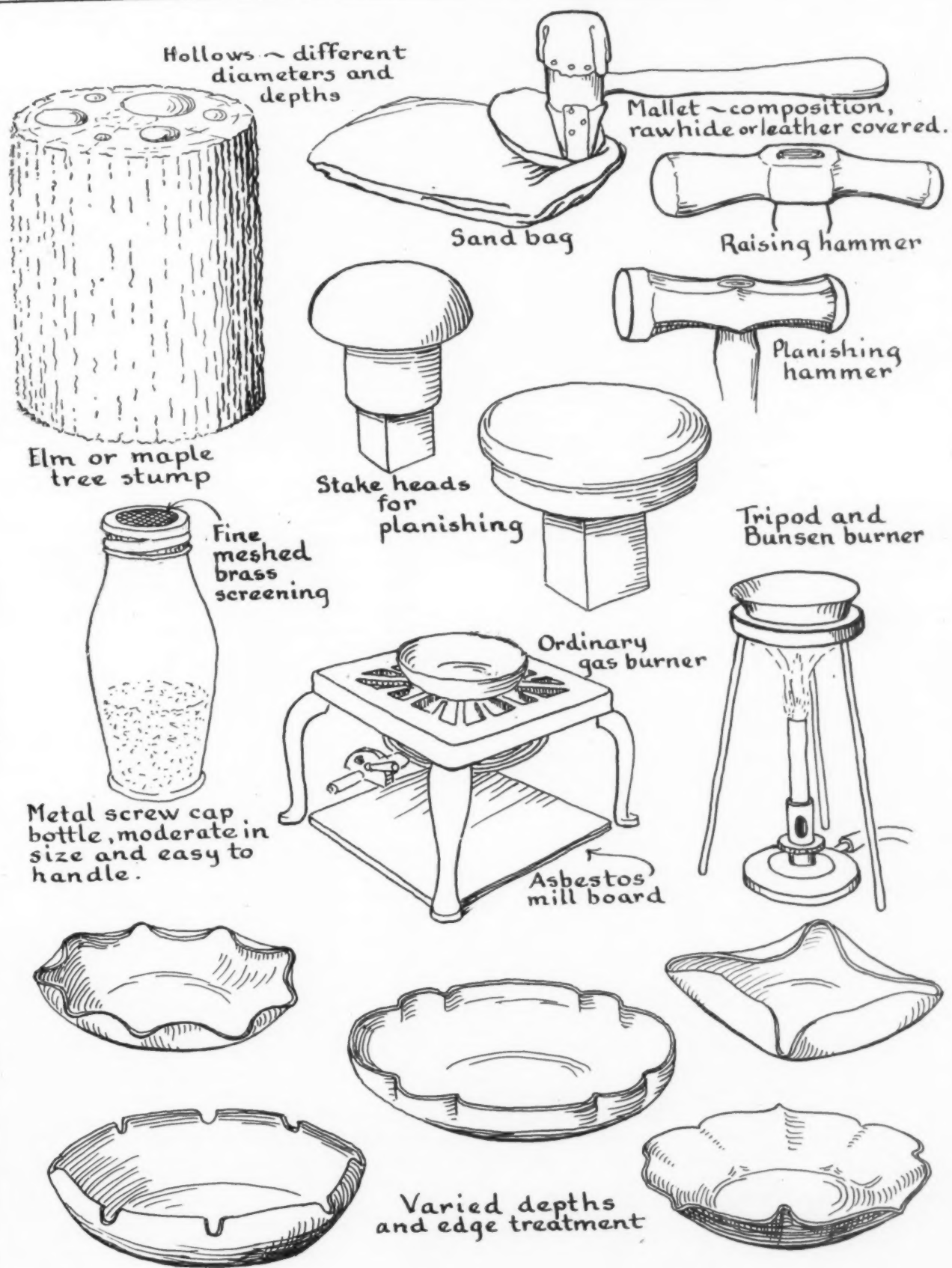
A *School Arts* article on chip carving last year inspired my seventh grade class of boys in the Kirkwood, Missouri, Junior High School, to try their hand at it and they were quite successful.

In their shop classes they cut and beveled four-inch squares of white pine, sanded them smooth, then brought them to the art class for carving. Their designs were worked out on paper and



practice carving was done on scraps of wood. Very attractive paperweights were finally made, stained, and polished, and squares of felt or other heavy cloth were glued to the base.

This is a popular technique used by senior high classes, also, on boxes and trays.



# FINGER PAINTING • • • A BIBLIOGRAPHY

DR. PETER J. NAPOLI

Consultant in Psychology, Binney & Smith Co.

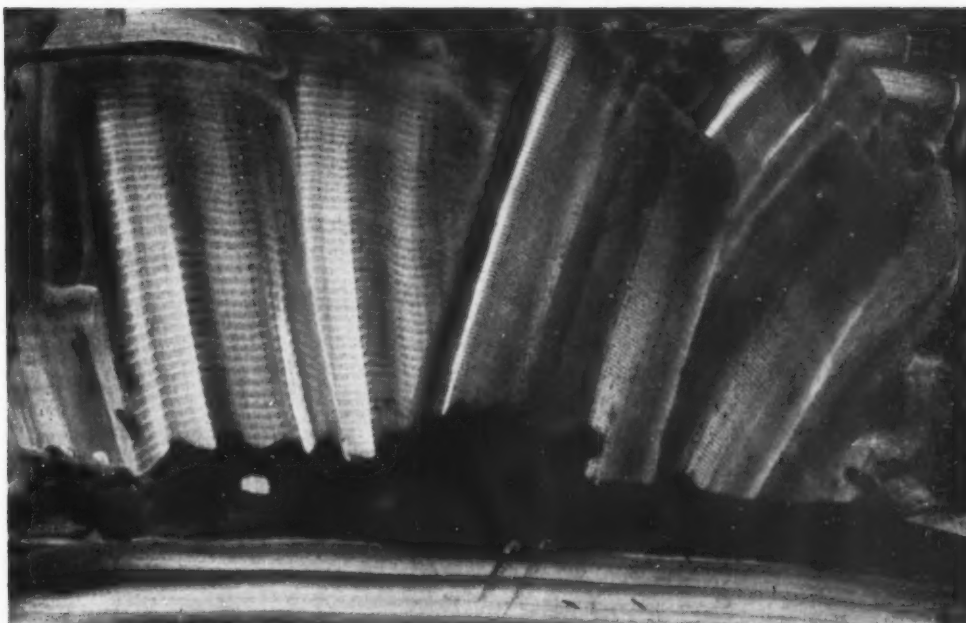


URING the past decade and a half, much enthusiasm and interest has been shown in Finger-Paint. As it has been tried and has become more widely known, the literature has grown to such proportion that it is felt worthy of compilation and publication.

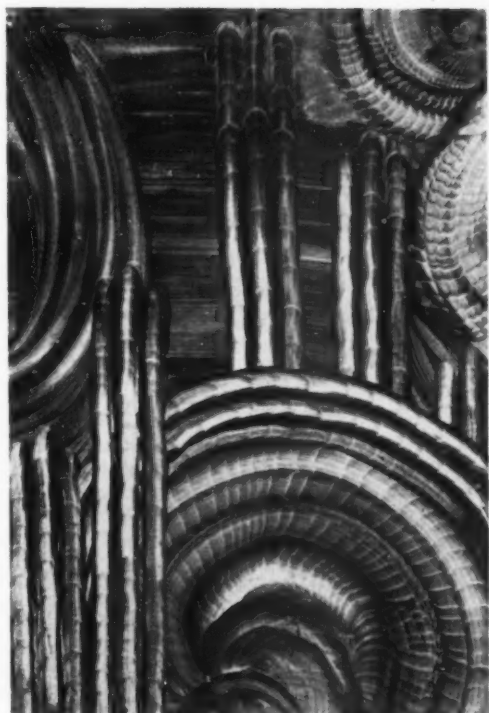
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"The Bombed City." Reimi Pellika



"The Sea's Pipe Organ." Jennie Kosir

## FINGER PAINTING

FRANCIS L. STOKES  
Art Supervisor, Ely, Minnesota



"Falling Water." Veronica Kosmack

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## HAND-DIPPED CHRISTMAS TREE CANDLES

MYRA J. INDRIKSON, Lincoln Ave. School, Orange, New Jersey



CHRISTMAS with all its traditions cannot be fully experienced without ideas and activities including candles. Both young and old can achieve an even greater delight if their Christmas candles have the personal touch of having been made by themselves or someone dear to them.

Hand-dipped Christmas Tree Candles are fun to make for primary children as well as for older pupils. Materials needed are simple and easily available. They include small pieces of candle-wicking or soft, heavy white store cord, clear paraffin—new or used—pieces of old blue, yellow, green or white candles, colored wax crayons, and several deep saucepans.

Care must be taken to insure safety in the melting of the wax. The odds and ends of white, yellow, blue and green wax are slowly melted. If clear white wax or new paraffin is being used alone, include a few scraps of green crayon to provide the color. Variations of green shades are produced by using blues and yellows in the mixtures.

After the wax has been completely melted, remove the pan from the stove and place in a suitable position for several children to begin dipping. The wax will remain melted longer if the pan is placed in another containing warm water.

Candles are started by knotting one end of the wick and dipping it into the wax. Allow each coating to harden before re-dipping. To facilitate hardening of the wax after each dipping, the candle may be immersed in a pan of cool water in between dippings. Allow the water to completely drain before dipping back into the melted wax.

As the candles increase in size a cone-shaped tree will begin to form with little or no help of the "dipper." This occurs through the gradual hardening of the melted wax as it drains to the base of the candle. Trees may be made as large or small as individual tastes desire or as material and time permit. When completed, clip off the extra wick at the top, leaving a small end for lighting.

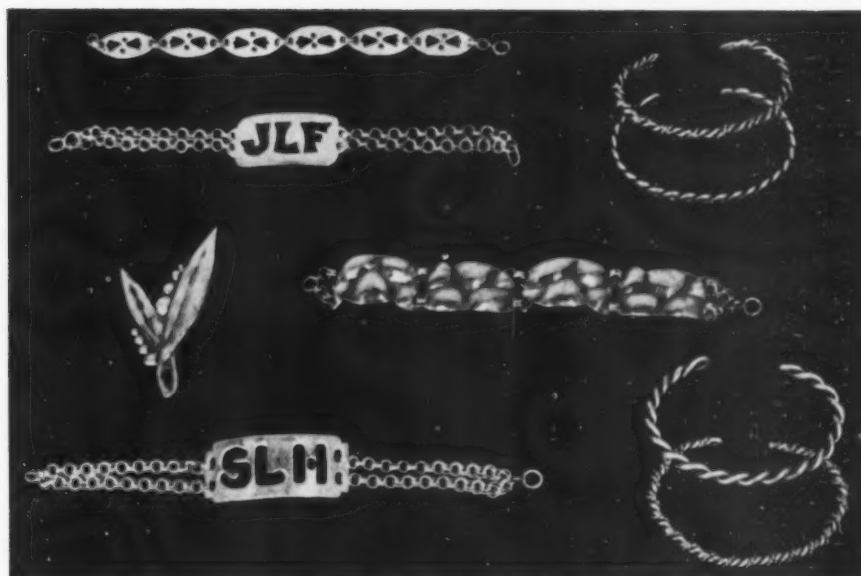
The little tree candles may be decorated if desired by using colored wax crayons. Melt slightly the tip of a crayon in the flame of a burning candle and apply lightly to the tree. Various color and design creations may ensue according to the creative instincts of the children.

Painted metal discs or small flat cans make excellent stands and bases. Here again individuality in form and design have free play.

The final thrill comes when each child lights his candle to see how the flame on the top glows as brilliantly as the star on his real tree on Christmas Eve.

# JEWELRY for HIGH SCHOOL STUDENTS

JEWEL H. CONOVER  
St. Louis, Missouri



BUNSEN burner, a few hammers, files, and jewelers' saws, a hand drill, dapping tools, fine sandpaper, fine steel wool, small pliers, liver of sulphur, rouge—this was all the equipment necessary to make dozens of bracelets in the Kirkwood, Missouri, High School art class, a few of which are shown in the photograph.

For the small-link pierced bracelet, 20-gauge silver was used. The design accurately drawn on tracing paper was glued to the silver and pricked through to the metal with the point of a compass. Holes were drilled, saw blade attached at one end to the frame was threaded through and then tightened, and the design sawed out. All edges were straightened and made regular with vertical filing, then slightly beveled with the needle file suited to the various shapes. The links were curved slightly to fit the wrist by hammering lightly with the large end of a horn hammer on a sandbag.

Connecting links were made by twisting a foot or so of 18- or 20-gauge silver wire around a  $\frac{1}{8}$ -inch nail or mandrel, then sawed apart. These circles were threaded through the openings provided and pressed together until the ends met. This is done gently but firmly with pliers in order to retain the perfect circle shape. The twisting and manipulating hardens the silver so the double chains made with these pairs of circles for the identification bracelets were strong enough for girls' use—it is not, however, recommended for boys. Eighteen-gauge silver was used for the monogram units; and the beauty of these depends on extreme accuracy and beauty of the letters themselves.

The four-link modeled bracelet was made of 20-gauge silver, the design pricked on and then outlined by hammering on a wooden block with a nail that had been ground down to a wedge shape, or a similar jeweler's tool. The link was turned over and ball and

dapping tools in four sizes were used to hammer in the raised design, alternating with the outline on the other side. The silver should be annealed frequently so it will not crack as the hammering hardens it. This is done by holding it in the Bunsen burner with a cheap pair of pliers until it glows, then dropping it in dilute sulphuric acid to clean it (9 parts of water to 1 of the acid), lifting it out with copper tongs (ours are a home-made pair we made from a strip of copper), then washing in water.

The twisted bracelets were most fun and easiest to make. For a simple twist 8- or 10-gauge silver wire, fourteen inches long was used, bent in half, the loop end squeezed together with pliers and the free ends secured in a vise. Then it is twisted with the pliers, annealing frequently, until the twist measures six inches. Deep scratches can be avoided by protecting the end with a bit of leather. The strip can be bent to an oval shape with the hands. The ends are sawed or snipped even, hammered on a piece of metal until they are tightly blended, then held so they point down into the tip of the small flame of the Bunsen burner until they melt together. The silver is melting when it looks wet.

Eighteen or 20-gauge wire about 24 inches long was doubled and twisted to 10 inches for the double twist bracelets, and the small twist made to follow a groove of the larger twist as closely and tightly as possible. The ends, again, were hammered and melted together.

All file marks were removed by rubbing with fine sandpaper, then fine steel wool. The silver was colored or "antiqued" by painting with liquid liver of sulphur, washed in hot water and the surplus rubbed off with kitchen cleanser. Then each piece was polished until brilliant with jeweler's rouge rubbed on a piece of fine leather or suede.

Pins were also made and the pins and catches attached to the back with soft solder. Earrings were modeled from 24-gauge silver and screws made of plastic were attached with a strong cement.



# MATERIALS FOR SCIENCE DO-SOMETHING CLUB

## APPLIED BIRDLORE

Sketching the bird and coloring it on the handle end of a wooden letter opener is absorbing the interest of these members of the Do-Something Club at the Buffalo Museum of Science



## SCULPTURING IN WOOD

Robert Knoble, member of the Buffalo Museum of Science's Do-Something Club, is shown here sandpapering the piece of wood which he will later fashion into a bird letter opener



## THE LOWLY INSECT

It is fun to collect your own insects with a net, use the "killing jar" and then spread and mount the little "beasties" for your friends to see. This is one activity carried on by Do-Something Club members at the Buffalo Museum of Science during the summer



## MATERIALS FOR SCIENCE DO-SOMETHING CLUB

### SUMMER SKETCHING

A group of Do-Something Club members who have chosen to "try-out" water colors and oils on a vase of bright garden flowers. Those on the left are intent upon a male wood duck as a model

### APPLYING BIRD KNOWLEDGE

John Elly and Henry Kowalewski (left to right) members of the Buffalo Museum of Science's Do-Something Club are here shown hand-painting their wild bird letter openers made from wood entirely as a hand project involving saws and sandpaper



### IMITATING NATURE

Did you ever make three-dimensional flowers? Here the members of the Do-Something Club at the Buffalo Museum of Science are learning the parts of a flower by making them with colored crepe papers. The flowers are mounted on cards upon which the proper leaves are sketched and crayoned



# LETTERING, BOOKMAKING, AND RELATED CONSTRUCTIONS

CLARA P. REYNOLDS, Seattle, Washington

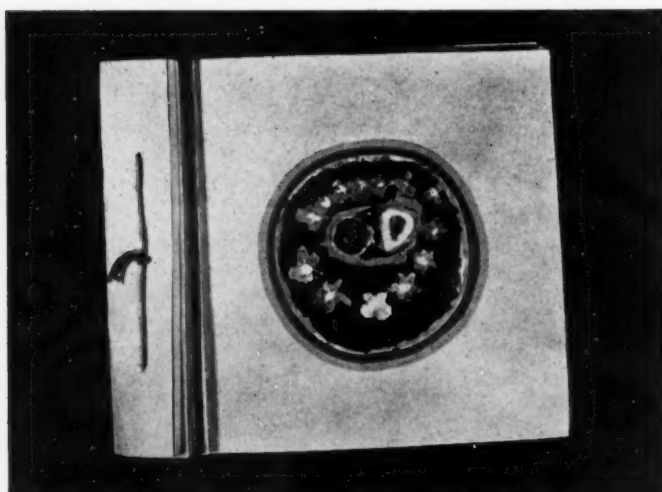


Illustration I. A first grade, large classroom booklet containing paintings from each child. Miss Fanny Copeland, Teacher, Bryant School, Seattle

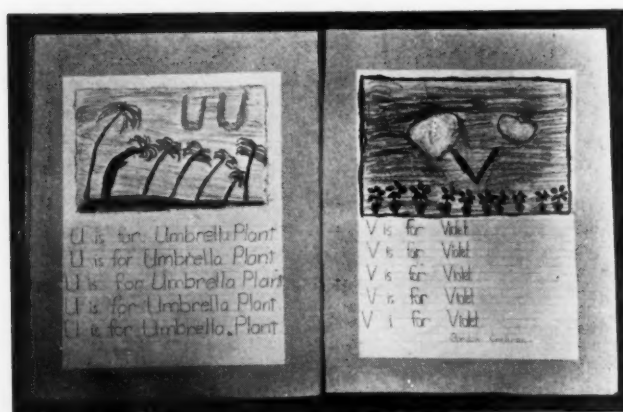


Illustration II. An A B C book with script lettering and paintings from each child

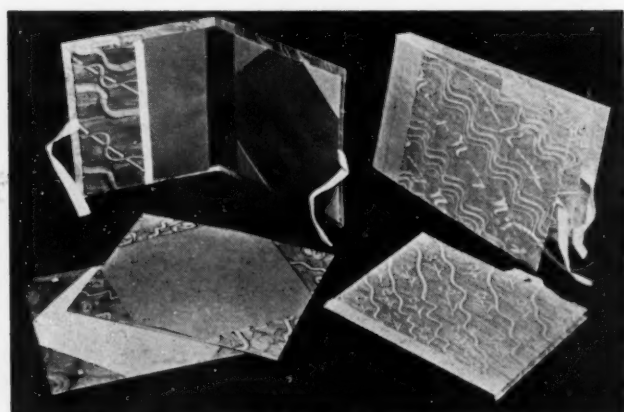


Illustration III. A writing case and folio decorated with finger painting, made in the fourth grade



THE following notes are quoted from the 1946 Report of the Seattle Public Schools' Committee on Art Curriculum:

## LETTERING

Children use letters on their posters, their scrapbooks, their folios, and their school and community signs. They learn to recognize correct letter forms and to judge proportions and spaces. Their activities with letters develop in them an appreciation for printed books and magazines, and an awareness and understanding of the art elements present in all well-planned lettering or printing.

Children in primary grades have a fine preparation for lettering. Through printscript they learn to recognize the basic letter forms, and to consider the spaces and proportions. They are encouraged to make their letters straight, even, and uniform, and to group their words closely, and to space fully between words. Their progress from crude to more refined letters sets the stage for projects of the fourth, fifth, and sixth grades which will eventually lead to originality as well as clarity in lettering.

Successful participation after the printscript stage calls for additional skills in forming the letters and keener judgment in planning word, phrase, and page. Skills in cutting paper letters and in manipulating lettering pens must be acquired. Wider appreciation of the relationship of lettering to everyday things and of the craftsmanship in lettering and printing may be expected. There should be greater understanding of color and composition, of spacing and proportion as they relate to lettering. Habits of planning the layout and visualizing the letter forms, of caring for the tools and sharing the materials will be formed as the children progress toward constructing more legible and expressive signs and posters.

Lettering with the various media will increase the knowledge and skill the children have obtained from their primary activities and direct them toward a fuller appreciation of letter forms and typography.

For any given problem, children may choose the most suitable medium—pencil, crayon, chalk, cut-paper, or pen.

In grades four, five, and six, children will discover many uses for lettering. They may wish to letter original poems, stories, labels, captions for room displays, maps, covers of scrapbooks, folders, programs, or charts.

Although originality in layout and letter forms is to be encouraged, the lettering must remain legible. Letters and layouts which are simple and direct are generally more easily seen and understood than those which are highly decorative. Simple, straight, well-proportioned and well-spaced Gothic letters are more readable than Old English letters or other highly decorative letters.



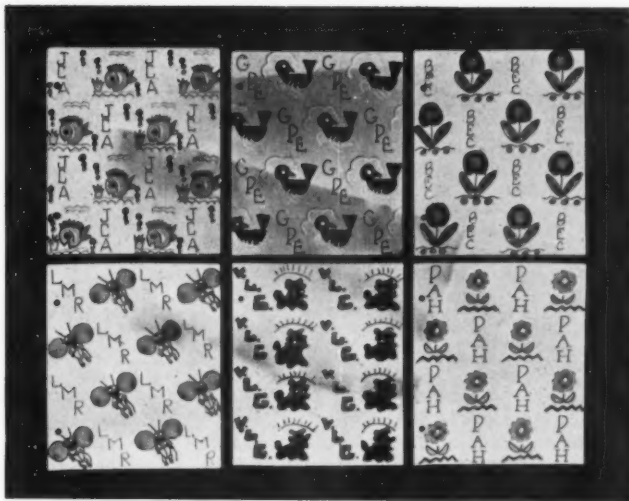


Illustration IV. Designs for paper to cover notebooks using initials by fifth grade children

In gaining legibility, however, children will be placing certain restrictions upon their freedom of working. It is important for the teachers, therefore, to make every effort to induce creativity through lettering and, at the same time, emphasize the importance of legibility.

Indications of growth are independence, freedom, and originality in working with letter forms and layout, and improvement in letter proportions, spacing, and page plan.

In grade six the introduction of lettering pens and ink will be a novelty and the skills of pen lettering will interest children in this grade. The growth in skills, however, is less important than the creative growth arising from increased originality and legibility in lettering and layout. Insistence upon more accurate measuring will help the children refine their plans and refine their judgment of space and proportion.

#### BOOKMAKING

Under Paper Construction and Crafts it is suggested that booklets, envelopes, folios, and related constructions be made to fill school and community needs. Folding, scoring, cutting, mitring, sewing, and pasting are experienced and become available for any creative venture, such as the albums for the Junior Red Cross. Decorative papers for book covers, end papers, and writing folios involve the art activities of stenciling, blocking, finger painting, or free painting of design units.

#### ILLUSTRATIONS

The enclosed illustrations (photographs) are taken from examples of children's work on display in the Art Office, or from the work provided for the Seattle Junior Red Cross:

1. First grade, large classroom booklet containing paintings from each child
2. An A.B.C. book with script lettering and paintings from each member of the class

3. A writing case and folio decorated with finger painting, made in the fourth grade
4. A design for paper for covering a notebook using the initials from a fifth grade child
5. Paper plates, folding cases, booklets for remembrance, albums, folios for clippings, made by students in the fourth, fifth, and sixth grades
6. A poster in cutting and painting made in the sixth grade

These illustrations were made from work provided by the Art Department of the Seattle Public Schools under the direction of Dale Goss, Director of Art, and Elizabeth Robinson Hyatt and Mary Fullington, Assistants. The teachers whose work is represented are Mary Foss, Alki School, and Marjorie Seymour, Seward School.



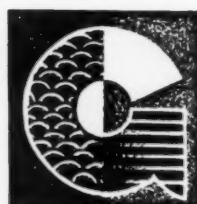
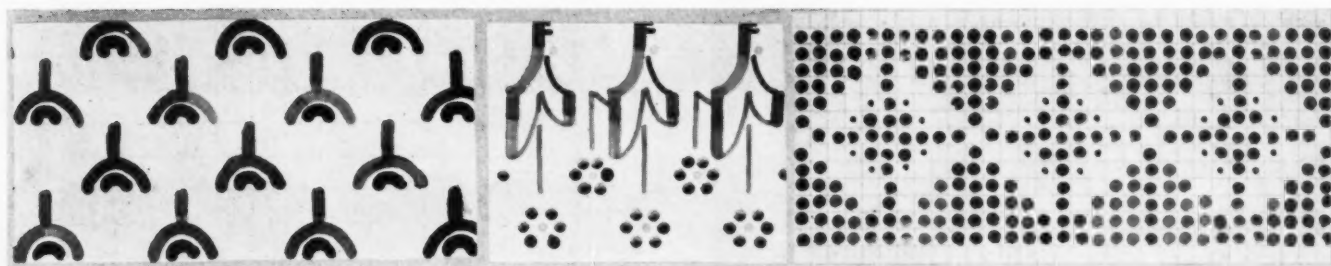
Illustration V. Paper plates, folding cases, booklets for remembrance albums, folios for clippings, made in the fourth, fifth, and sixth grades



Illustration VI. A poster in cutting and painting made by a sixth grade student

# FUN WITH THE LETTERING PEN

STELLA E. WIDER, Lynchburg, Virginia



GIVE the youngsters in the elementary school a real thrill! Introduce them to the round-nibbed lettering pen. This is a fine forerunner for lettering in the junior high—a splendid background for the formal lettering of the senior high.

Pupils of the fifth and sixth years handle the pens well, and thoroughly enjoy using them. Even those who ordinarily show little interest in any kind of art work are fascinated. Their use encourages a certain creative ability among those who have a fixed idea that they cannot create—an idea which should never have been allowed to creep into their minds.

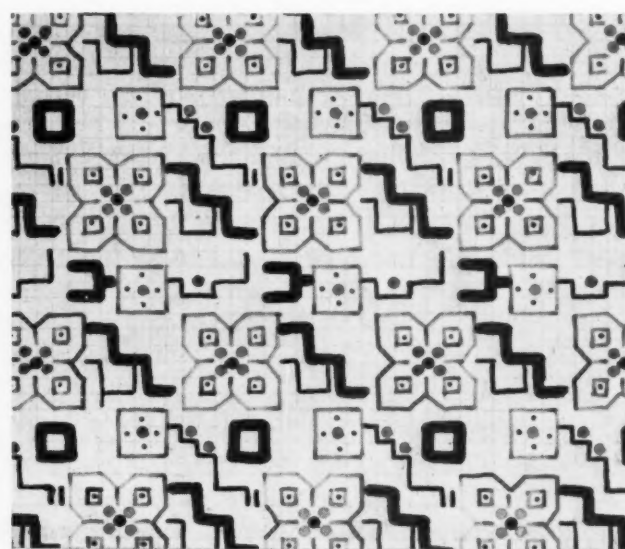
Of course, with these young pupils, we do not begin lettering at once. The largest size pen is used with beginners. First of all, they are led to find out for themselves how high to hold the pen, and how much ink to use, to make perfect "dots." When dots can be produced without drags, one-fourth inch squared paper, say four and one-half inches by twelve, is given out. With similar squares on the board, they are shown how a simple border may be carried out. This is erased and then they are "on their own." They create really lovely designs using the dot alone. After a trial or two, they are shown how to use water color with the pen, as most elementary schools are not equipped with colored inks. Then, too, with water color, they can create their own colors. The process of using water color with lettering pens is simple. The color must be put on pen with a brush. Thus it works very well.

Having learned how to hold the pen, pupils are shown how to pull the pen for broad vertical strokes. They learn to turn the paper instead of the pen. The next venture is an all-over design. It must be an original design, using combinations of strokes, dots, etc. Curves come next.

Now they are ready for really creative efforts without benefit of squares to guide them. Some fear to work without a light pencil guide for planning, but others revel in freehand strokes. What patience is developed. What concentration!

In the latter half of the sixth year, pupils are ready to enter into easy lettering with any sized pen. Stencils, as we call them, are made on squared paper. This is merely the planned lay-out for the placard-to-be. Openings in this paper are then cut, fitting each line of words. The stencil is clipped, or taped, to the board. By means of a straight edge, preferably a small card, the wording is quickly placed on the board, free of erasures. By following the squares on the stencil, and the planned spacings, lines are kept level, letters vertical. When the stencil is removed the inking can be done very quickly. As many placards as needed may be made with the one stencil. This is a great time saver in the making of the many placards pupils are called upon to make, at short notice.

This previous knowledge is also a great time saver for the junior high group, with its crowded curriculum. Just the knowing how to handle the pen saves so much time. Then the simple planning of balanced lay-outs gives children confidence in their ability to work by themselves.

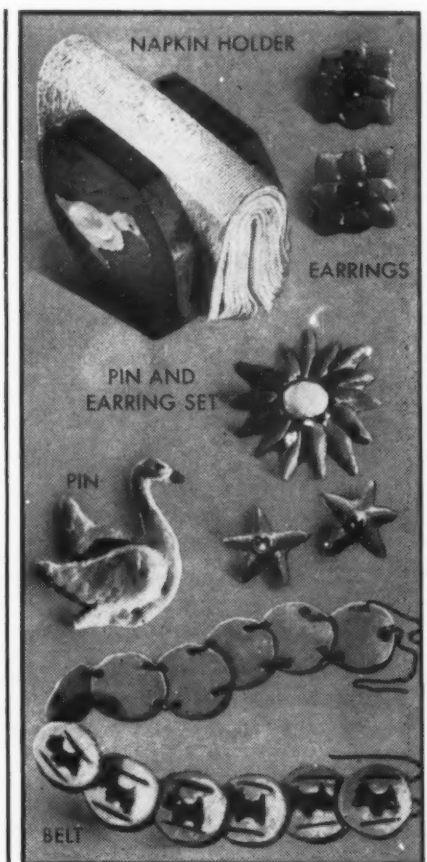




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**THE OBJECTS SHOWN** in the panel were modeled with PLASTIC WOOD by students in the 7th, 8th and 9th grades in the Herron Hill Junior High School, Pittsburgh, Pennsylvania.

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**THE TEST COURSE** was conducted over an 8-week period at the Herron Hill Junior High School, using simple items available in every home—such as flexible wire, paper clips, small boxes, coat hangers, beads, felt, colored cords and safety pins.

• Designs were just drawn on cardboard, either by tracing or free hand. PLASTIC WOOD was then added in thin layers as the modeling progressed. In fashioning the belt the following steps were taken. First, the design was drawn on a cardboard milk bottle top or a similar piece of cardboard; second, PLASTIC WOOD was applied in a thin layer to the underneath or backside of the disc; third, PLASTIC WOOD was modeled in a thin layer around the design; and fourth, the design itself was modeled in relief with PLASTIC WOOD.

• The holes through which the thin leather thongs are laced, to hold the discs together, were made with a pin or a piece of wire while the PLASTIC WOOD was still soft. When dry, each section was sand-papered to a smooth finish, painted and decorated. Any type of paint, nail polish, aeroplane "dope" or varnish is practical for a bright, colorful finish.

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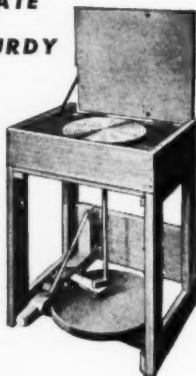




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How about taking a trip this month to the Grand Canyon? We'll explore the depths of the earth's crust that reveals before our amazed eyes the history of the earth itself! Each strata discloses evidence of the evolution—and of strange reptiles that lived thousands of years ago—and it is a thrilling thing to realize that even as we stand on the edge of the abyss, the shiny ribbon of the Colorado River far below is at this moment revealing even more remote chapters of history as it cuts its way steadily downward.

Every beam of the sun, every hour of the day or night, every cloud in the sky brings about a panorama of colors that stirs the senses and makes you long to capture the ever-changing rainbow that is the Grand Canyon.

If you would like to have a 38-page booklet, filled with photographs of the spots in the Southwest that you'd like to visit, all you have to do is to drop me a card and I'll gladly see that you obtain a copy of **GRAND CANYON OUTINGS**, published by the Santa Fe Railroad and containing information about accommodations by the Fred Harvey organization.

The Canyon itself is just one of the many attractions that beckon you to this colorful Southwestern wonderland. There's sunshine, sombreros, beautiful Indian jewelry and woven goods, the barren beauty of the wasteland—and the placid existence of the Indians whose looms are dedicated to beauty and whose lives are spent following the simple pattern of tending flocks and making handicrafts set by their ancestors many centuries before.

After you've looked through the pages of this booklet and have seen for yourself the wonders awaiting you in the Grand Canyon region, you'll be planning to travel the Santa Fe way next summer—and to explore the delights of the interior of the Canyon—making the descent on sad-eyed, sure-footed little burrows—viewing the magnificent sweep of Nature's sculpture from the vantage points such as Watchtower at Desert View, Yavapai Observation Station, Yaki, Moran, and Lipan Points.

For your first stop on the "see America First" journey, see the amazing accomplishment of the Colorado River—and the rainbow hues cast over the canyon will be a never-to-be forgotten invitation to return again and again to the compelling beauty that is the Grand Canyon.

Like to travel from historic New Orleans to the West Indies? Once more American Express comes through with a cruise that might have been created especially for you, so perfectly does it incorporate into one exciting voyage all the spots you've wanted to see. Ports of call sound like pages out of an exotic past—such as Nassau, Havana, Kingston, Jamaica, of pirate fame. Colon, Panama, sight of the wonderful Panama canal locks—St. Thomas, Virgin Islands, sight of Bluebeard's castle, Fort De France and St. Pierre on the island of Martinique, birthplace of Empress

(Continued on page 7-a)

## **24 plates of Costume Design \$1.00**



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Drawings and Notes by Eudora Sellner

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If these are the things you would like to know, as well as how the frills, collars, cut of sleeves, and decorations were arranged and, in addition, the proper color harmonies for each costume—then *History of Costume Design* is just what you want.

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Now it's time for me to go exploring again—find more news about things to do and places to go! Remember, send your requests for travel information to *HAPPY HOLIDAY*, 172 Printers Bldg., Worcester 8, Mass.

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### **The Family Circle's TEACHERS Exchange Bureau**

Subscribers will find in this column notes about educational literature and the latest developments in art helps for the classroom. Readers may secure copies of the printed matter mentioned as long as the supply lasts by addressing **THE FAMILY CIRCLE**, 171 Printers Building, Worcester 8, Mass., and enclosing the required amount for each item requested.

★ Pouring afternoon tea can be a truly aesthetic experience when you have such attractive tea tiles as those illustrated in full color in "Circular Designs in Indian Art." Here's the chance to give your pupils' imagination the "green light" and then watch with wonder while they create attractive and colorful designs and preserve them for continued enjoyment on these tea tiles. This 6-page folio published by the Tea Tile Mfg. Co., has 21 color reproductions of the finished products. Some tiles have ships, flowers, birds, or scenes from the outdoors as their designs.

Share with your pupils the enthusiasm that comes from creative work. Send 3 cents to Secretary, **School Arts Family**, 172 Printers Bldg., Worcester 8, Mass., before March 31, 1947, for "Circular Designs in Indian Art."

(Continued on page 9-a)





## Finger Painting with Alphacolor

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## Announcement

# APPLIED ART

By Pedro deLemos

is temporarily out of print. Another edition of this valuable art book will be printed as soon as the paper on order arrives.

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★ The School Service Department of the Westinghouse Electric Corp. has just announced a 14-page booklet describing free and inexpensive teaching aids.

Designed primarily for grades 7 through 12, the new education materials listed in the booklet include charts, motion pictures and slide films for science classes, home economics classes and a host of others. Teachers are provided with this up-to-date material direct from the forefront of industrial research. The booklet, "Teaching Aids," is invaluable in bridging the gap between textbook and students' interest in current developments.

Send 3 cents to Secretary, *School Arts Family*, 172 Printers Bldg., Worcester 8, Mass., before March 31, 1947, for your copy of "Teaching Aids."

★ A new hobby that young and old, amateur and professional, in fact, just about everyone seems to enjoy is fingerpainting. Weber Costello Company foresaw the popularity of this new hobby and published a 4-page pamphlet, "Finger Painting with Alphacolor."

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**DIRECTIONS:** Find the article or service you want on the classification list below. Following the name are the index numbers of firms handling that product or service. Look these numbers up in the **Directory of Suppliers** which starts on page 14-a.

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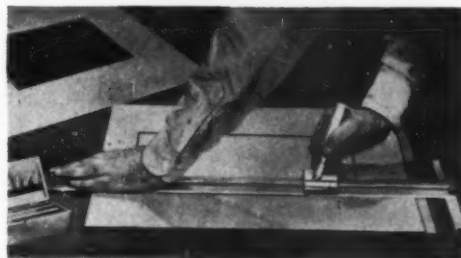
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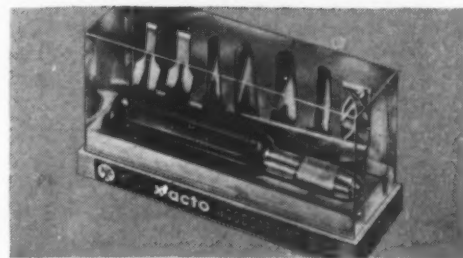


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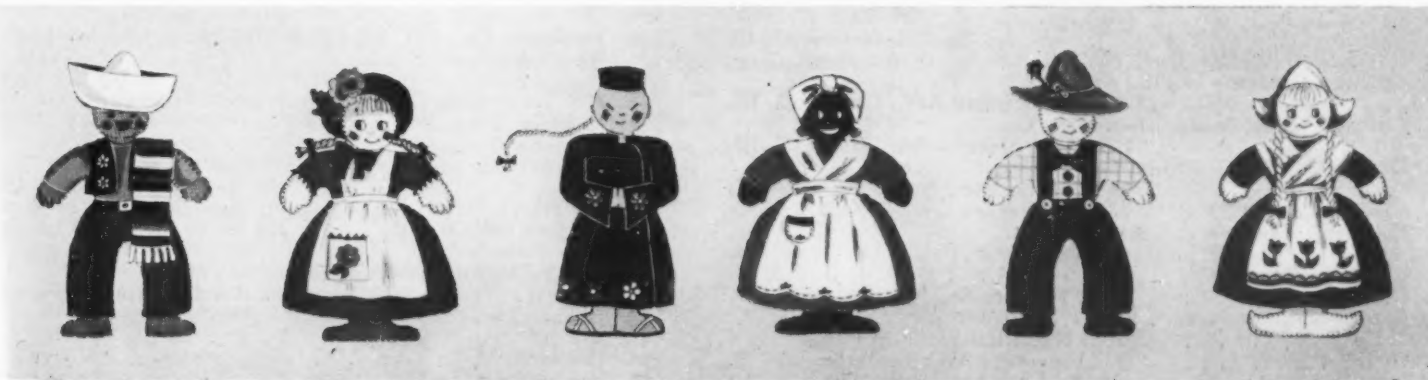
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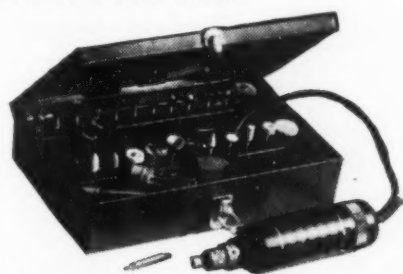
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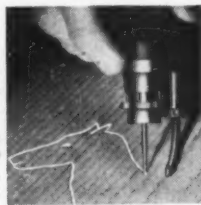
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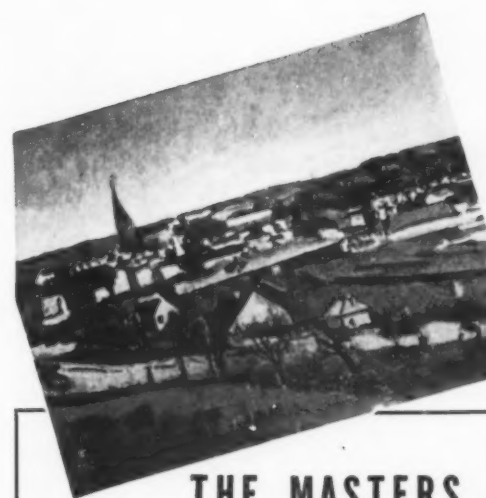
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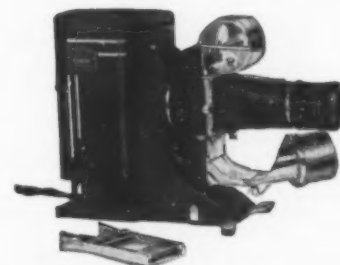


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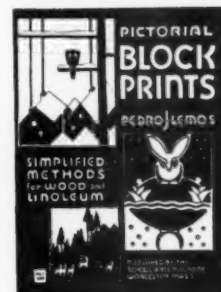
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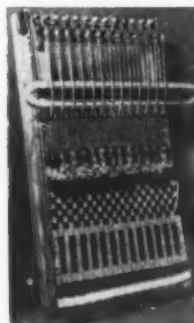
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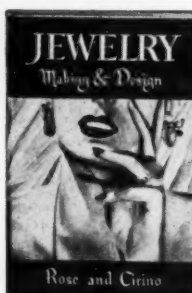
The famed Yugoslav sculptor Ivan Mestrovic has been appointed professor of sculpture at Syracuse University. He will arrive from Europe early in December. Mestrovic's affiliation with the School of Art is expected to result in the formation of a new department of sculpture. Plans for this department will be developed in 1947.

Mestrovic, who ranks among the world's leading artists, has exhibited his work throughout Europe. An expert in carving and modelling, he gained fame through specific works: a mortuary chapel for a family named Racic; portraits of the French sculptor, A. Rodin; the memorial to France at Zagreb and the colossal figure of Bishop Gregory of Nin.

Mestrovic was born in Vepalje in Croatia-Slavonia, taught to carve and model by his father and in 1900 was a student at the Academy of Fine Art, Vienna, under Edmund Hellmer. His best known work in America is two mounted North American Indians, cast in bronze and erected in Grant Park, Chicago.

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Manual Arts Press	6-a
Pacific Press Publishing Association	9-a
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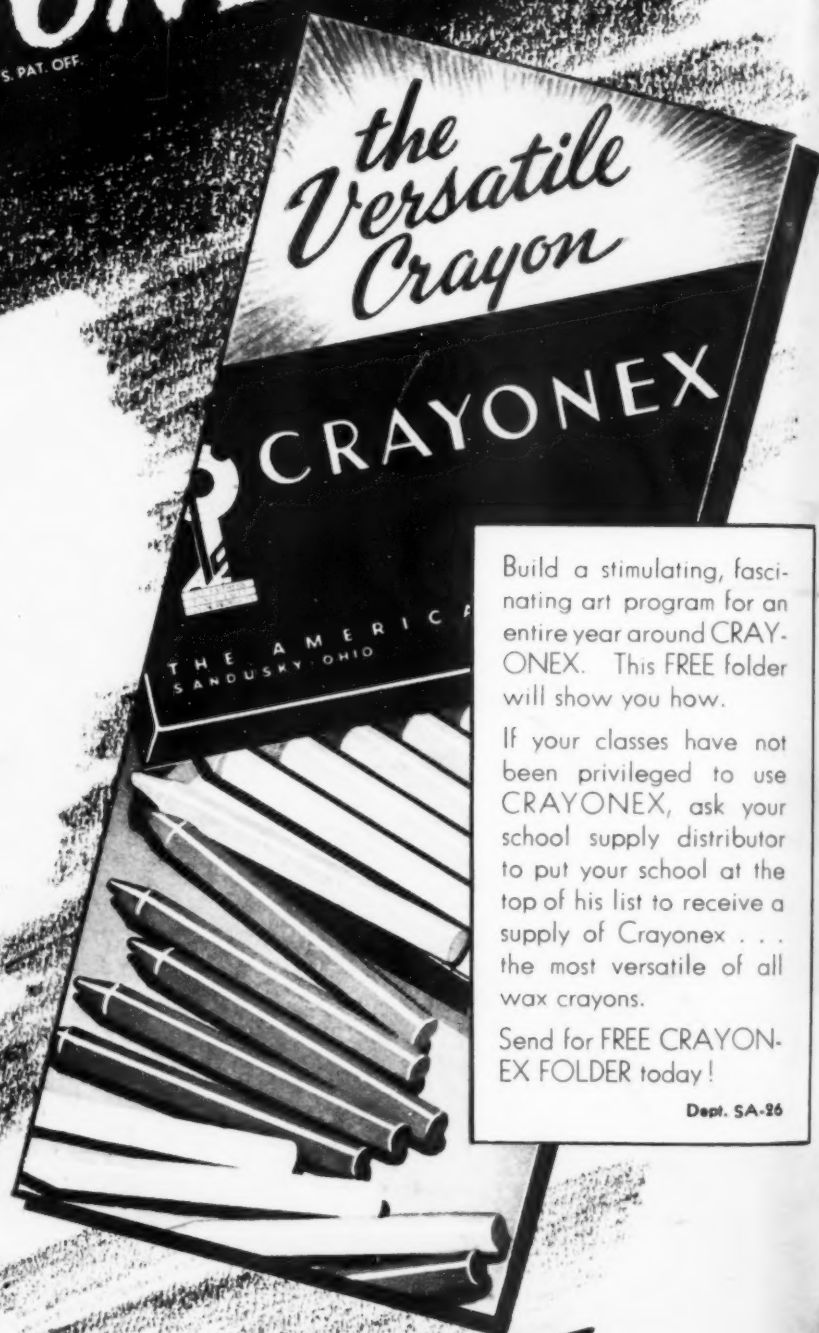
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